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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY  
MITCHELL BROS. COMPANY,  
(INCORPORATED.)

VOL. XII.

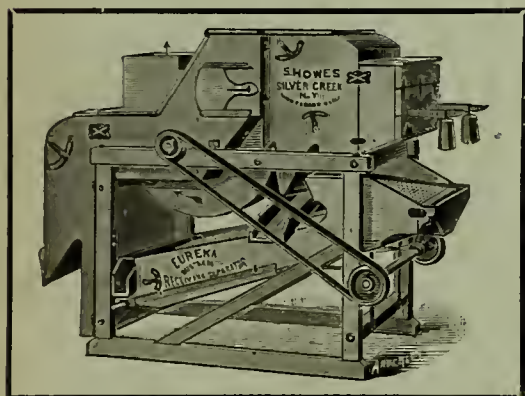
CHICAGO, ILLINOIS, DECEMBER 15, 1893.

No. 6.

SUBSCRIPTION PRICE,  
ONE DOLLAR PER ANNUM.

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FOR ELEVATOR USE



**COMPRISES** The Eureka Warehouse and Elevator Separator.  
The Eureka Double Receiving Separator.  
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LEATHER, RUBBER, COTTON AND LINK BELTING,

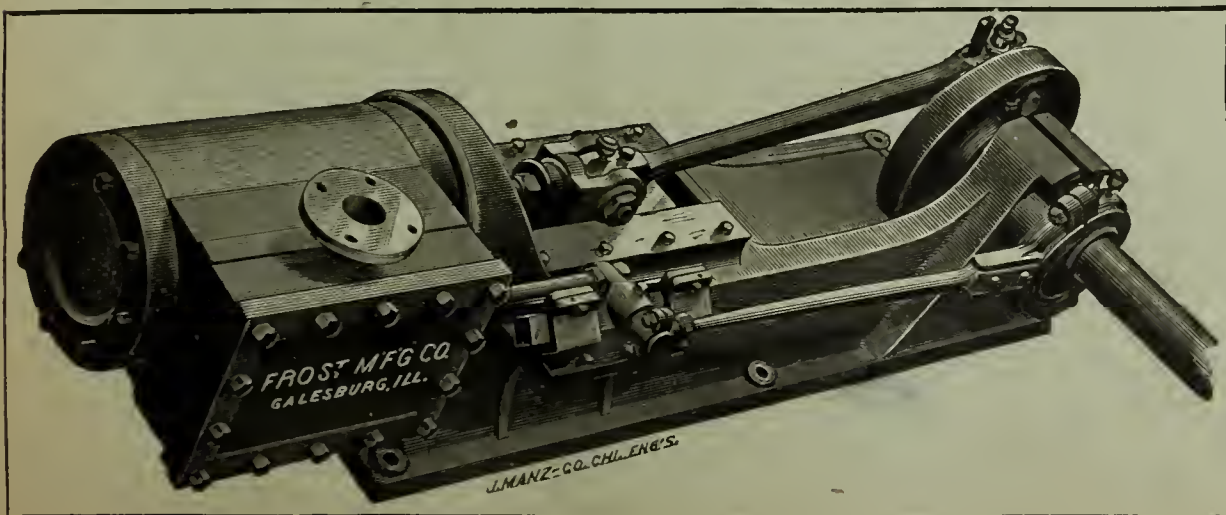
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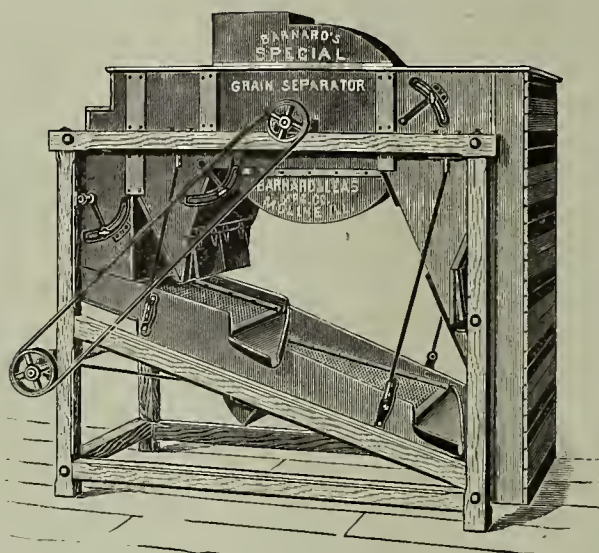
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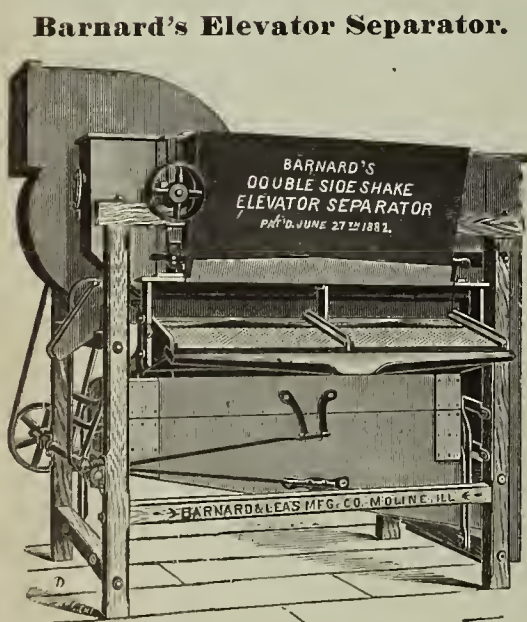
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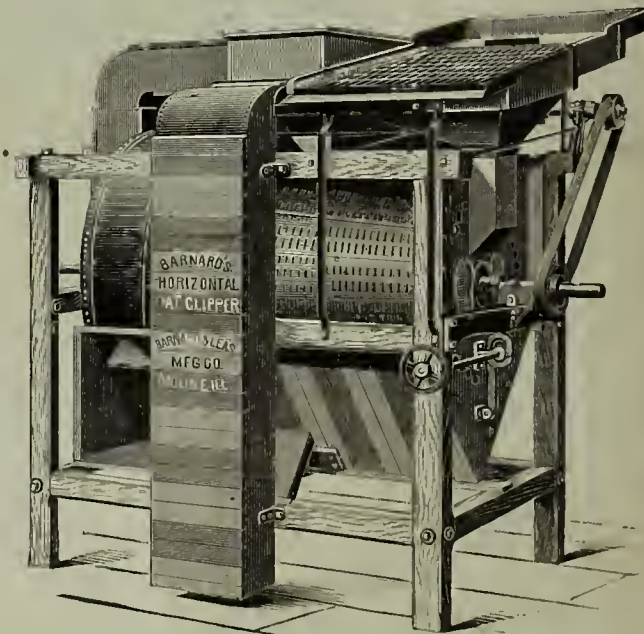


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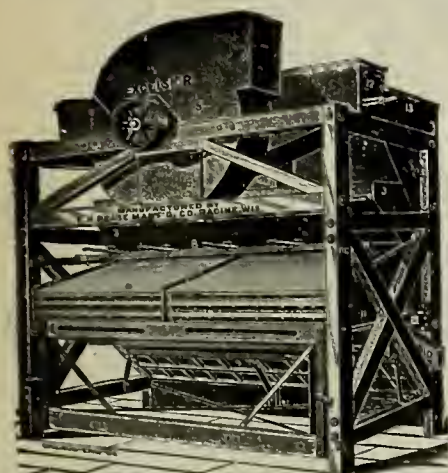
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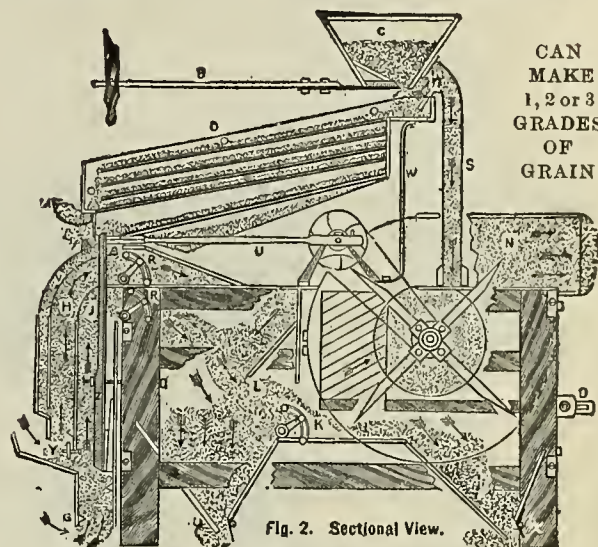
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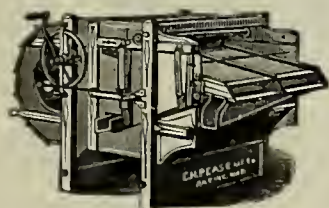
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Cleans, Separates and Grades Perfectly.  
HAS NO SUPERIOR IN THE WORLD.



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GRADES  
OF  
GRAIN

**EXCELSIOR SEPARATOR AND GRADER.**

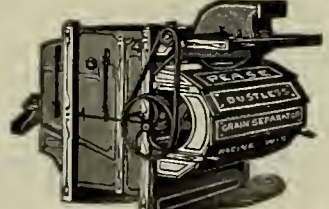
The Finest Wheat or Barley Machine on Earth



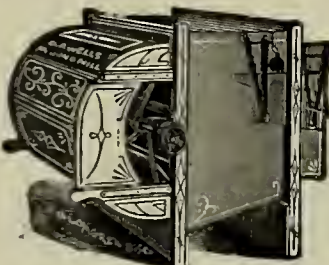
Pease Side-Shake Mill for Warehouses.



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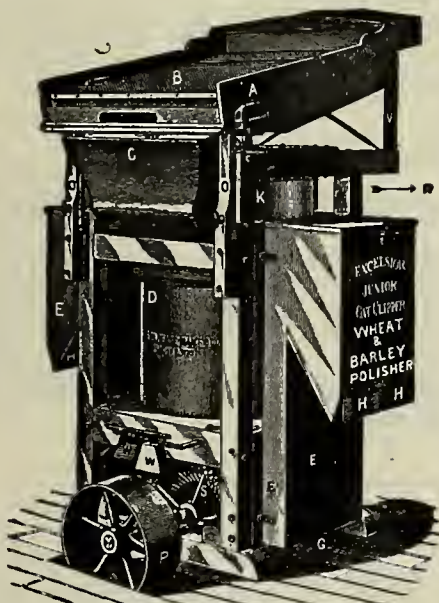
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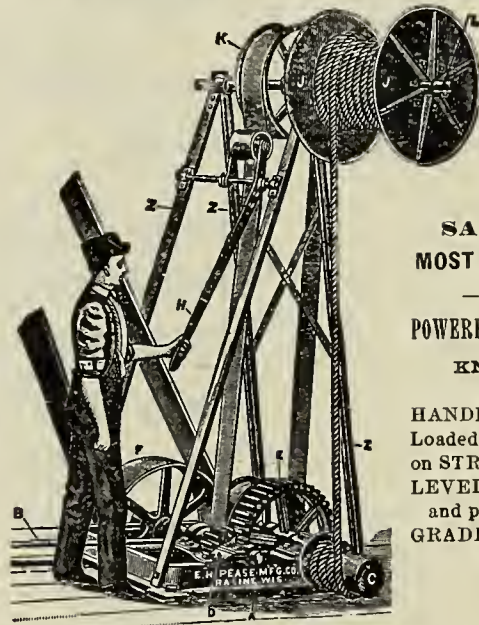


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**PEASE**

SPECIAL  
FLAX MILLS  
ARE  
SUPERIOR  
TO ALL OTHERS.



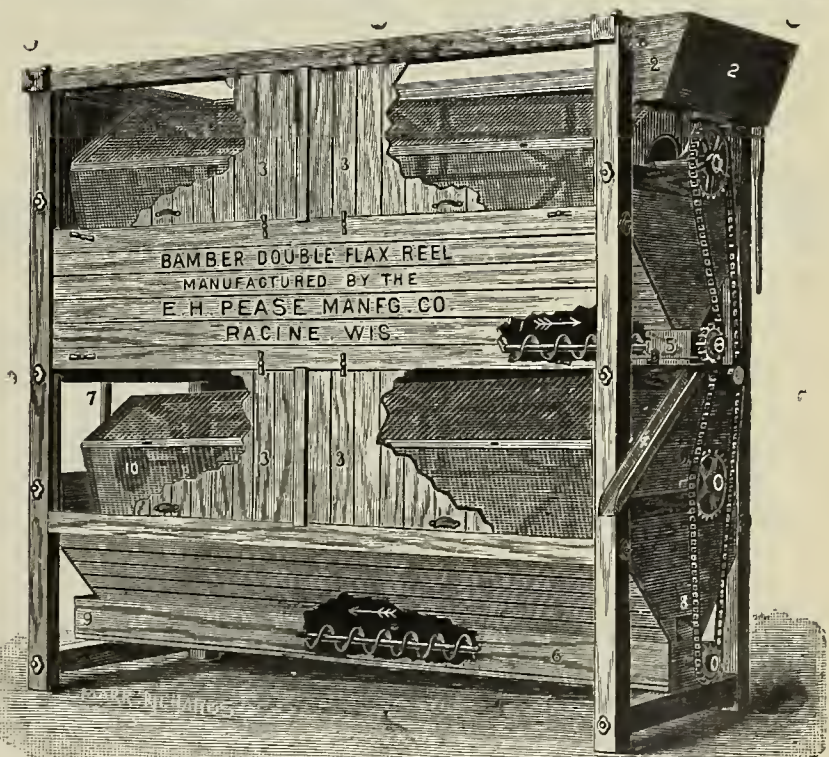
**SAFEST,  
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HANDLES 1 to 20  
Loaded Cars at once  
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Made with 1, 2 or 4 Reels in one Chest, and with or without  
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Reels of any desired style or dimensions made to order.

WE FULLY WARRANT

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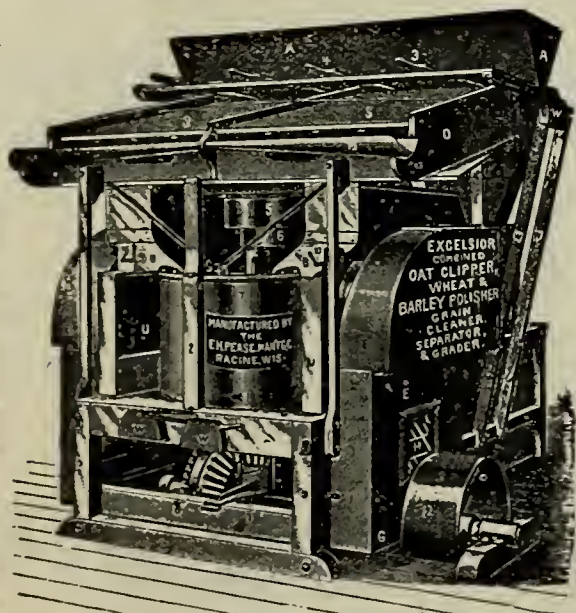
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This Machine has no Legitimate Rival in the World.  
Send for particulars.

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FAMOUS HAND OR POWER CLEANERS COUNTRY ELEVATORS.

The Successful Combination of 3 MACHINES IN ONE.



# Grain Cleaners.

## THE MONITOR SEPARATORS

The Most Perfect Grain Cleaner Ever Offered.

No cleaning elevator can be operated as economically without these machines as it can be with them.

They take less power than any other.

They are easier to place.

They are easier to spout to.

They require less care and attention.

They will do better work and more of it.

They will handle all kinds of grain.

They are standard machines, well and thoroughly tried.

The merits of these machines are best exemplified by the fact that all of the leading cleaning elevators built in the United States and Canada during the last three years, have adopted the machines. These elevators are built on the latest and most improved plans and methods.

**OVER 2,000 IN USE AND EVERY ONE A REFERENCE.**

**As a Barley Cleaner it Has no Equal.**

If you are interested in Grain Cleaning it will pay you to investigate this machine.

Write for detailed descriptions, etc., to

**HUNTLEY, CRANSON & HAMMOND, Silver Creek, N. Y.**

Our Pacific Coast Agencies each carry a complete stock of machines for prompt shipments west of the Rocky Mountains

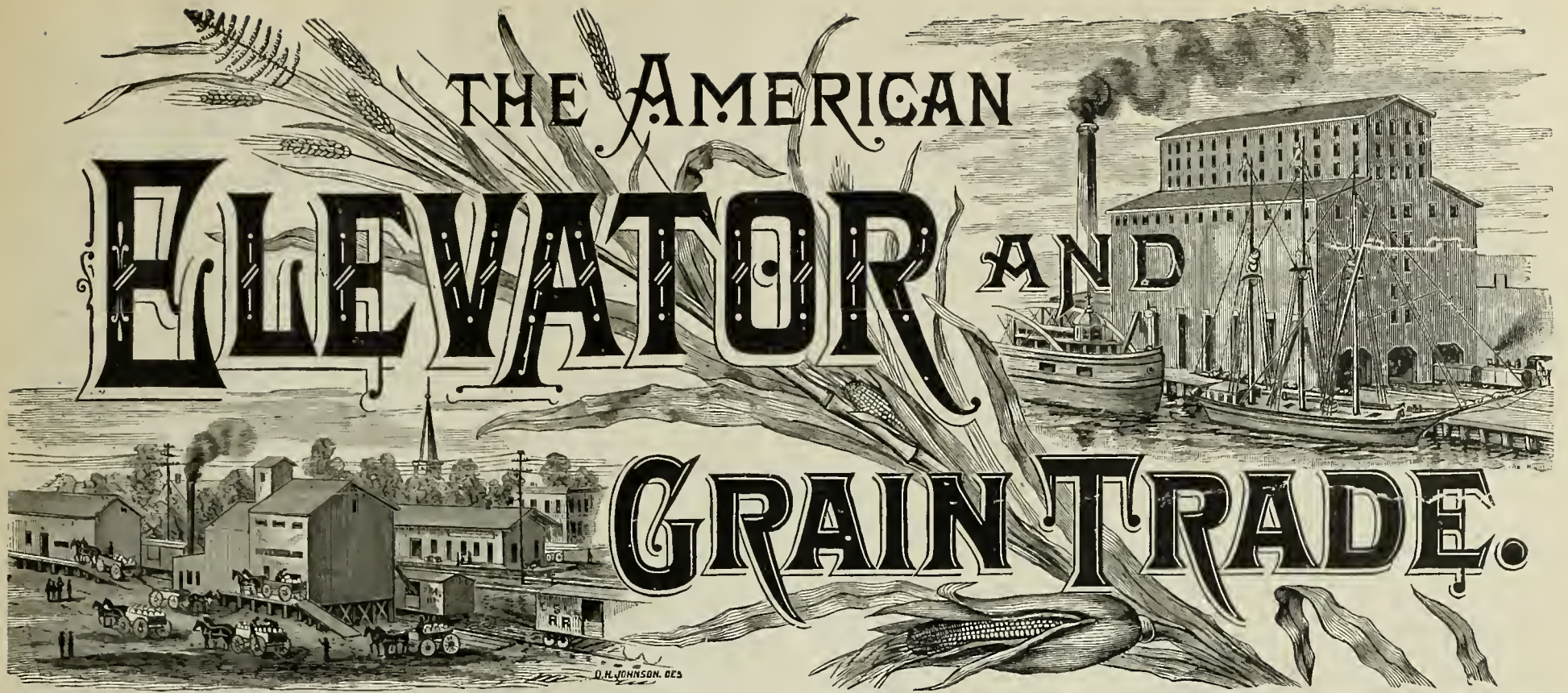
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SUBSCRIPTION PRICE,  
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### THE EASTERN ELEVATOR AT BUFFALO, N. Y.

The Eastern Elevator, with a capacity of 1,750,000 bushels, which is illustrated herewith, has just been completed and turned over to the owners, Messrs.

William P.

Northrup, John

C. Graves and

George A. Lee

of Buffalo. It is

built on one of

the most advan-

tageously lo-

cated elevator

sites in the city

of Buffalo, be-

ing on the Buf-

falo Creek near

the foot of Main

street. The cost

including the

value of the

property was

\$1,100,000. The

contract for

this work was

placed in the

hands of James

Stewart & Co.,

elevator archi-

teets and con-

tractors of St.

Louis and Buf-

falo, and active

work was begun

upon the erec-

tion of the

building July 1.

The first timber

was placed in

position on the

15th of August.

Notwithstand-

ing that the

contractors had

a very limited

amount of

ground upon

which to place

their material,

the work was

rushed with

all possible

speed, work

being carried

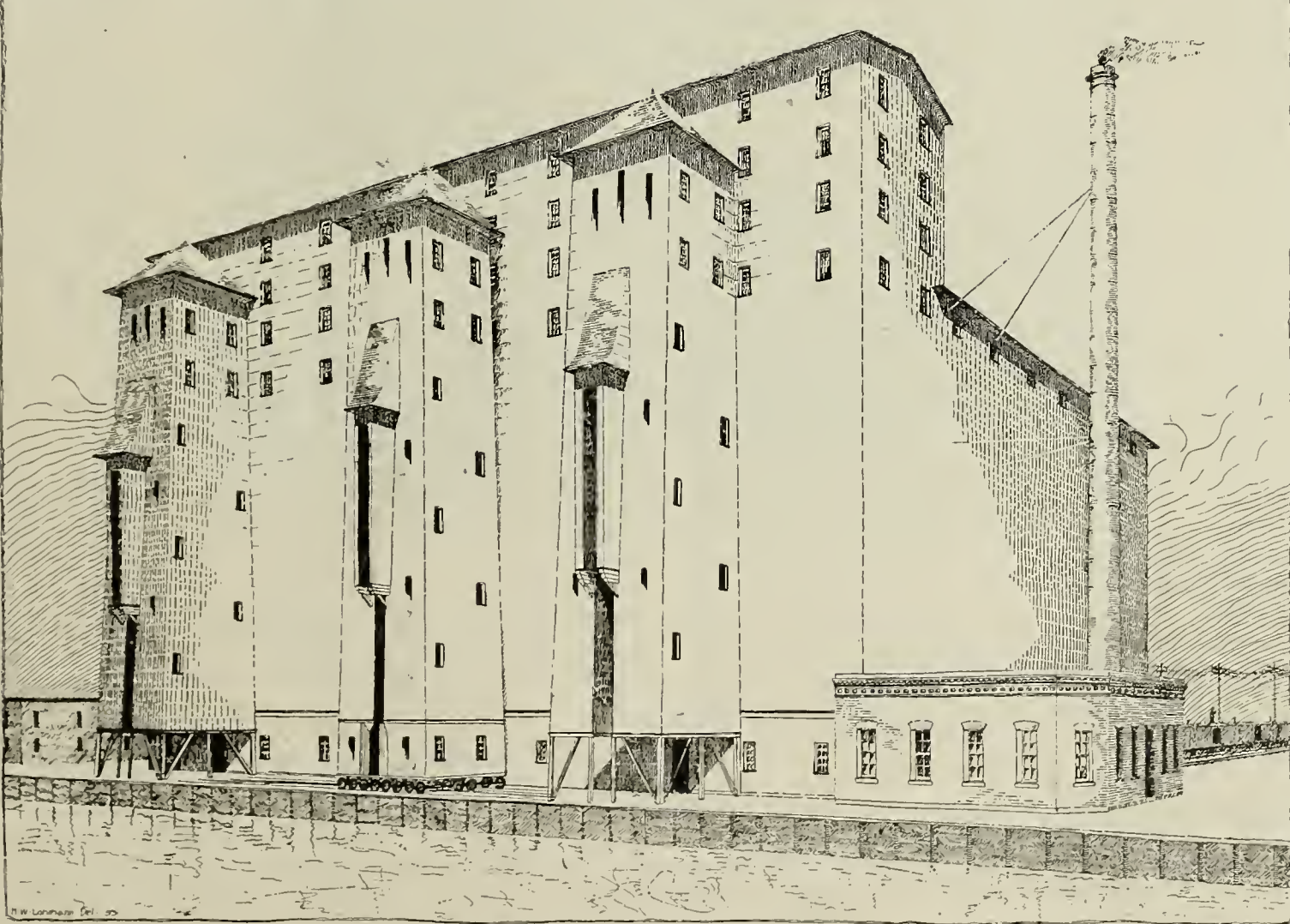
on Ganson street, and is 162 feet in height from the grade line to the apex of roof. It is supported upon a foundation of 4,961 piles, upon which are erected 261 stone piers, and upon these the framing supporting the bins is placed. This first story framing is entirely different from that carrying all other Buffalo elevators

extend through the bins so that the settlement of the cribbing does not affect the cupola nor the machinery therein, and the alignment of the machinery is not changed, thus greatly reducing the possibility of fires from hot bearings. The first story above the bins is a very high floor and contains the spouting for dis-

tribution of grain throughout the house, the second floor is the scale floor, the third floor the receiver floor, and the upper floor contains all the head machinery for elevators.

There are inside the building eight elevator legs, each having a capacity of 15,000 bushels per hour; these legs are used as lofters for receiving from marine legs and for loading out into canal boats or cars. The grain which is to be loaded out into the cars is weighed in scales on the second floor of the cupola and shipped over conveyor belts to cars at the Ganson street end of the building, at which point

ONE & ONE HALF MILLION BUSHEL GRAIN ELEVATOR  
FOR THE EASTERN ELEVATOR CO., BUFFALO, N. Y.  
JAMES STEWART AND COMPANY, A.D. 1893.  
ENGINEERS AND CONTRACTORS, OFFICES  
SAINT LOUIS AND BUFFALO.



THE EASTERN ELEVATOR AT BUFFALO, N. Y.

and is an entirely new design of Stewart & Co., each bin being carried upon separate timbers. The bottom timbers of each bin are carried upon girders independent of all adjoining bins. The cribbing is 80 feet in height and each bin has a capacity of about 9,000 bushels of grain.

The cupola is four stories in height, supported directly from the first story framing on columns that

eight cars can be placed at one setting. The grain for canal boats is weighed in scales placed in the two stationary towers, in which there are also receivers capable of holding the entire load which will be carried by canal.

Grain for the elevator is taken entirely from steamers and vessels on the Buffalo Creek front of the building, at which point there have been placed three



outside marine legs for unloading, each having an elevating capacity of 15,000 bushels per hour. Two of these legs are located in stationary towers, and the third in the movable tower, this latter being of the same height and size as the stationary ones. It is mounted upon 40 car wheels, which run upon a track, giving the tower a range between the two stationary towers, so that in unloading large vessels the three marine legs may be placed and grain unloaded at the rate of 45,000 bushels per hour. At this rate the largest lake cargo can be unloaded inside of three hours. This is the only house in Buffalo having such a large handling capacity, and, although commenced very late in the season, the contractors have finished their work in time to fill the elevator for winter storage and in such satisfactory manner that from the time of the unloading of the first cargo to the close of the season over 20 cargoes, containing nearly 2,000,000 bushels of grain, have been unloaded without a shut-down of one moment for repairs of any kind. At the same time shipments of 357,000 bushels have been made by canal, and 85,000 bushels by rail.

The engine and boiler house is a large one-story brick building, with a foundation supported on piling and contains a battery of three horizontal tubular boilers of 250-horse power each, a Hamilton-Corliss Engine of 650-horse power, having an 18-foot driving pulley wound with 16 strands of 1½ inch tallow laid transmission rope, conveying the power from the engine to the top of the house and to the various stationary and movable towers. There is also located in the engine room a Westinghouse engine, driving an arc and incandescent dynamo for lighting the entire plant, two large Underwriter's pumps for fire protection, each having a capacity of 60,000 gallons per hour, also feed water pumps and switch-board for control of lighting. All the machinery throughout the building is provided with friction clutches so arranged that any elevator or conveyor may be thrown in or out of gear while shafting is running, and the elevator head clutches are connected by means of cable with the lower floor so that they may be operated from that point. Longitudinal and cross conveyors are liberally distributed both on lower floor and spouting floor, so that grain may be taken out on one corner of the building and placed in any other point with one elevation only.

The fire protection of the elevator has been carefully looked after, the contractors having equipped the building throughout with the Grinnell system of dry pipes, the water for same being supplied by the two Underwriter's pumps in the engine room, and the exterior of the building is protected by a showering system of outside Grinnell sprinklers immediately under the upper and lower cornices and on ridge of roofs, including the fixed and movable towers, so arranged that the entire outside of the building may be covered with water, in case of fire in adjoining buildings.

The elevator is under the management of A. P. Wright, so well and favorably known as one of the largest grain handlers on the lakes, and the offices of the company are located in the Merchants' Exchange Building, Buffalo.

James Stewart & Co., engineers and contractors for grain elevators, railroad work and heavy structures, have secured so much work in the East the past year that they have established an office at Buffalo, which they will continue in connection with their St. Louis office. Among the structures erected by this company during the past year is the Eastern Elevator, the 500,000-bushel storage and cleaning elevator for the Illinois Central Railroad at New Orleans, the 500,000-bushel elevator for the Orthwein Bros. Commission Company at St. Louis, the 250,000-bushel elevator for George Urban, Jr., and others at Ordway, Colo., the 100,000-bushel elevator for the Missouri Pacific Railroad Company at Coffeyville, Kan., and the company has just contracted to build a 1,000,000-bushel elevator for the Coatsworth estate at Buffalo.

The following railroad buildings were also erected: Shops and 40-stall round house for Baltimore & Ohio Southwestern Railroad Company at Chillicothe, O.; freight depot for the Louisville & Nashville Railroad Company at St. Louis, Mo.; railroad shops for the C., C. & St. L. Railroad Company at North Linn, O.; Little Miami freight depot for the Pennsylvania Railroad Company at Cincinnati, O.; 20-stall roundhouse for the C., C. & St. L. Railroad Com-

pany at Cincinnati, O.; 8-stall roundhouse for Ohio & Mississippi Railroad Company at Cincinnati, O.; 15 passenger stations in Ohio for the Baltimore & Ohio Southwestern Railroad Company.

In the line of miscellaneous structures the following were erected: Power house for the Cataract Construction Company at Niagara Falls, N. Y.; barrel warehouse for the Victoria Milling Company at St. Louis, Mo.; bonded warehouse for the Ravenswood Distilling Company at St. Louis, Mo.; Aluminum works for Pittsburg Reduction Company at Niagara Falls, N. Y. The cost of the buildings erected aggregated \$1,449,250, which makes a very flattering showing for the business of this company, which is growing very rapidly.

## NEW WAY TO SETTLE BOARD OF TRADE DEALS.

Robert Lindblom of the Board of Trade is the father of a plan which, if accepted by the members of that body, will revolutionize the conduct of its business. Incidental to this change, it will also dispense with the services of several hundred settling clerks.

Mr. Lindblom proposes that the Board of Trade have a sort of clearing house for this purpose. This idea is not a new one, and members of the board have for a long time looked for some system that would be an improvement over the present one. To Mr. Lindblom belongs the credit of formulating a system that presents the maximum of merit with a minimum of objection.

Mr. Lindblom submitted his plan to the Board of Directors two weeks ago, and since that time it has been the subject of close study by the members of the board. Mr. Lindblom was requested to be present and further explain his plan. He did so, and so favorably were the members impressed that they passed a resolution directing the president of the board to appoint a committee of five members of the board—not of the directors—to investigate the matter and report.

Mr. Lindblom said this morning of his plan: "The practical workings of the new system will be that next morning after contracts are made, and after all the trades have been checked, you hand into the clearing house a list of the contracts made on both sides, and if the amount bought and sold is equal, your liability ceases.

"If your sheet shows a loss, you hand in with it a check, or in case you have margins deposited, you can use that in payment by indorsing the certificate.

"If you are long or short on the market you figure that to the closing market price and add that to the amount to be collected or paid by you, but on these long or short balances there will be no charge from day to day.

"There are three methods by which you can remain long or short on your books and it is optional with you to choose either.

"Assuming that you are long for instance, you can when you make the purchase from satisfactory party, stipulate not to put it in the clearing house if agreeable to both, or you can go into the loan crowd and lend your contracts to some bear that is satisfactory to you; or you can request the clearing house to arrange it for you, in which case it reports to you next morning, free of charge, with whom you have the contracts, and unless there is a special report to the contrary you are assured that your party has paid his liabilities to the clearing house and that your trades with him are protected by at least 2 cents per bushel on grain, 20 cents per barrel on pork, 60 cents per tierce on lard, and 20 cents per 100 pounds on ribs. These rates can be changed as the market changes.

"It abolishes the settlement room, rings and substitution of contracts.

"Every trade remains open until maturity and actual delivery can be demanded.

"It eliminates all risks to parties even on the market.

"It makes failures practically impossible and fraudulent failures absolutely impossible."

These are the principal reasons in favor of Mr. Lindblom's plan. The greatest, and in fact almost the only, objection raised to it so far is the fact that the officials of the clearing house would be enabled to gain too much information as to the position of the large houses on the market. To meet this objection

Mr. Lindblom says: "That was an argument that I expected, and it is not a difficult one to meet. In the first place, only a few trusted men, pledged to absolute secrecy, will know the final results of the books, and they can be trusted better than an army of irresponsible settling boys. Large operators will conceal their position as they do now, by employing brokers, and the brokers can, if necessary, cover up their position in the loan crowd, while now their books are the gossip of the settling room."

R. G. Chandler, vice-president of the board, said in reference to the Lindblom plan: "I was present at the meeting of the directors when the Lindblom scheme was presented in detail. I think it has many good points and a few objections which may be overcome. First, it will do away with risks. I now think of a practical example. When the Cudahy failure came my house was 'long' a quantity of lard bought from other parties and 'short' an equal quantity to Cudahy. When the collapse came we were in the gap. We lost on the 'long' stuff and also on the 'short' stuff. Now, if the proposed plan of settlement had been in operation the 'long' stuff would have cleared against the 'short' sales and I would have saved \$1,200.

"One objection is that the people in the clearing house will know too much about the line a house is 'long' or 'short' and there may be leaks. A second objection is that a trader may get an objectionable party on the net balance due him on trades that are closed."

Another broker, in discussing the matter, said: "As to the element of secrecy, I don't think that objection has any very great weight, but I do think the getting of an objectionable party on your trades should be guarded against. For instance, I may have Pardridge's name given me some morning as at the other end of a trade. Now I never do business with Pardridge and don't want to, because he is a plunger and an element of disturbance in the market. But of course this is only a contingency and is not an overpowering argument against the scheme."

To illustrate the practical workings of Mr. Lindblom's plan, suppose that Broker A sells 50,000 bushels of wheat to B and buys 50,000 bushels from C. When his sheet goes into the clearing house the two trades balance and it is unnecessary for him to margin.

But suppose A sells during the day 100,000 bushels and only buys 50,000. The next day he is given the name of the person to whom the odd 50,000 bushels go and only has to margin for that amount. To defray the expenses of the clearing house a small sum will be charged on completed trades.

## CINCINNATI RECEIVERS AT WORK.

The grain merchants and the railway managers held a lengthy meeting recently which promises to result in much good to all concerned. Among those present were: From the railroads, Osear G. Murray, Albert S. White, Wm. McCallister, A. D. Fisher, A. H. McLeod, D. S. McCake, R. M. Frazier, H. Coope, H. Wilson Brown, J. A. Loudon and John E. Collins; from the grain merchants, R. A. Dykins & Co., S. R. Vorheis & Co., E. W. Holt, W. W. Granger, Jr., John P. Gale, H. L. Early, L. B. Daniels, Henry J. Good, J. H. Hermes, C. B. Burkam, John N. Wolliscroft, Charles S. Fisher, W. Wasson and C. S. Maguire.

This meeting was called at the instance of Commissioner E. P. Wilson of the Freight Bureau, for the purpose of considering and formulating a better and more simple system of handling grain from the Western farms through Cincinnati to the consumer; in other words, they want to put Cincinnati on an equality with Chicago, Peoria, St. Louis and other grain marts. To accomplish this, but one concession is required. Cincinnati merchants must be accorded the privilege of rebilling consignments at the through rate from the initial point to final destination, instead of, as at present, paying the local rate on each section of the haul.

This is a statement of the status of the case in a few words. After a full and free discussion of the merits of the demand and the territory in which the grain men want this privilege made operative, the railroad managers promised to submit the questions to their association, and assured them that at least a portion of their request would be granted.



**WALTHER'S ELEVATOR AT ENGLEWOOD, ILL.**

The growth of the wholesale grain, hay and feed business during the last few years has been marvelous and the period of rapid growth has not yet ended. This applies not alone to cities, for in many small villages are plants that prepare and ship large quantities of feed. The man who buys and prepares in large quantities can do it more advantageously and at less cost than the small retailer.

One of the most remarkably successful men in this business is A. F. Walther, whose new elevator at Englewood, Ill., is illustrated herewith. Without any experience to guide him Mr. Walther started in the business in the fall of 1889. Although an experiment he felt confident that retailers would buy at his house and thus save a trip of several miles into the city. That he has been successful is evidenced by the fact that this new house was commenced as soon as the ruins of the one burned last summer could be cleared away, and that he is now doing a business of \$85,000 to \$100,000 annually.

The elevator, which was designed and erected by the Seekner Contracting Company, architects and builders of grain elevators at Chicago, is 24x58 and 75 feet high. Its 18 bins have a storage capacity of 35,000 bushels. The house is 15 feet from the track of the C. R. I. & P. Ry., and grain is conveyed from the receiving sinks to the elevator boots by a screw conveyor. The grain is elevated by three large elevators, and the product from the feed mill is elevated by a medium sized elevator.

The bins are arranged in two rows lengthwise of the house. Their bottoms are not hoppers but slant toward middle line of house, and all discharge into spouts in middle of house. This arrangement was adopted to give ample room for handling sacked feed and grain on main floor. Five large sliding doors open into the hay warehouse from this floor on the north side of the elevator, two doors at the west end and one on the south side so that a number of wagons can be loaded at the same time. On the ground floor in the south half is the foreman's office, which is heated by steam, an Excelsior Cleaner and Clipper of 600 bushels' capacity made by the E. H. Pease Manufacturing Company, and a large size feed mill made by the Willford & Northway Manufacturing Company.

All grain is received from cars, immediately elevated to cupola and dropped into the scale hopper. It is then spouted to cleaner and afterward elevated to bins. The business is so arranged that the power plant is utilized in grinding feed principally when grain is being unloaded. The sacking spouts, which are arranged in a row in the middle of the house, have shut off valves near mouth. On this floor are two 3,500 pounds dormant warehouse scale conveniently located for weighing sacked feed. In warehouse besides elevator is a 6-ton wagon scale which is used in weighing hay, straw and feed sold in bulk. Its beam is inside elevator on working floor. The beam of the hopper scale is also on this floor. The valves of the six shipping bins and of the scale hopper can be operated from the ground floor.

Speaking tubes connect the foreman's office with

the office about fifty feet away, and with the cupola. The brick engine room adjoining contains an 80-horse power engine and boiler. Power is transmitted to main line shaft on ground floor by means of rope drives and to elevator heads by rope drives. Indicators and revolver spouts are provided so that grain can be spouted to part of the bins without going to the top floor. A Cyclone Dust Collector over the boiler room draws chaff, dust and waste matter from the cleaner and drops it into the fire.

The hay and straw warehouse adjoining the elevator is 31x106 feet, and if stored full would hold 300 tons. More than one-half this amount is seldom put in. The warehouse has a truss roof which gives a floor unobstructed by posts. The warehouse extends around in front of the elevator 24 feet to the sidewalk



A. F. WALTHER'S ELEVATOR AT ENGLEWOOD, ILL.

line, so that all goods are loaded under cover and without interference from outside traffic. Three large swinging doors open from the warehouse to the street, each of which will admit the largest wagons.

The entire plant is lighted by electricity. The loading spout shown in illustration gives ample facilities for loading grain or feed into cars. Some clipping is also done for Board of Trade firms.

Mr. Walther gives his personal attention to the business, and besides a bookkeeper, employs a foreman, two assistants, two teamsters and an engineer. Most of the buyers haul away their own goods, but three teams are employed in delivering to others.

Starch aggregating 2,526,100 pounds was exported during October, against 1,130,535 pounds exported during October preceding; and during the ten months ending with October 21,590,458 pounds of starch, valued at \$654,216, were exported, compared with 22,575,239 pounds, valued at \$708,051, exported during the ten months ending with October preceding.

**ELECTRICITY A SUCCESSFUL MOTOR OF CANAL BOATS.**

The first canal boat in the world to be propelled by electricity plowed through the waters of the Erie Canal November 18, and New York state added another victory to progress.

When Gov. Flower had seen the experiment made and heard the opinion of the electrical experts present that they considered it feasible, he said: "One of the most important steps in the march of progress has been taken. Increase the speed and you increase the capacity. If power can be obtained from Niagara, as it is suggested it can be, 50 cents per day will get the power for a canal boat that it takes four mules and two men to give it now. That means cheapening the rates for carrying freight. It means that 2½ cents will carry a bushel of grain from Buffalo to New York. Another 2½ cents is going to deliver it in Buffalo from Duluth. Five cents brings a bushel of wheat from the wheat fields to the metropolis. Isn't that going to beat the Mississippi route, or the Canadian route, or any other route? When this is done wheat is not going to stop in Minneapolis."

The test of the new method of propulsion was made on the Pittsford level, near Rochester, and was witnessed by a large party of notable persons. The overhead trolley system is used and the lateral movement of the boat, which allows it to pass another, is provided for by using pliable wire for the trolley. The boat was pushed along at the rate of from four to seven miles an hour. It is said that one boat equipped like that could tow six other boats at a good rate of speed.

The experiment was made with an ordinary canal boat, which had been fitted up with motors and trolleys like a street car. The power came from the Rochester street railway lines. The machinery and the motor worked perfectly. There was no hitch and nothing to mar the success of the experiment. Before the boat's destination was reached a speed of over six miles an hour was attained, with a voltage of 450 or less. It was a magnificent success throughout; it is no longer a theory, but a demonstrated fact; the section taken for the experiment was one of the most difficult on the whole canal, having several sharp curves, and has lock and wide water. Gov. Flower says that the cost of transportation by canal under a trolley system will be but 25 per cent. of the present rate. There is no doubt but what these figures are correct, and if so, a complete revolution will have taken place, when this system is put in force, for the 9,000,000 tons of increased freight that can be moved then, without any additional cost to the state, will restore the canals to greater importance as competitors with the railroads than has been known for years. The increase of business would certainly offset any greater amount of expense that might be incurred by the electrical system. We hope the time is not far distant when the present system of transportation, the mule and the steam power, will be replaced by what has been fully demonstrated as being practical, electricity.

The imports of hay into the United Kingdom during the ten months ending October 31 were 184,689 tons, against 44,342 tons for the corresponding period in 1892.



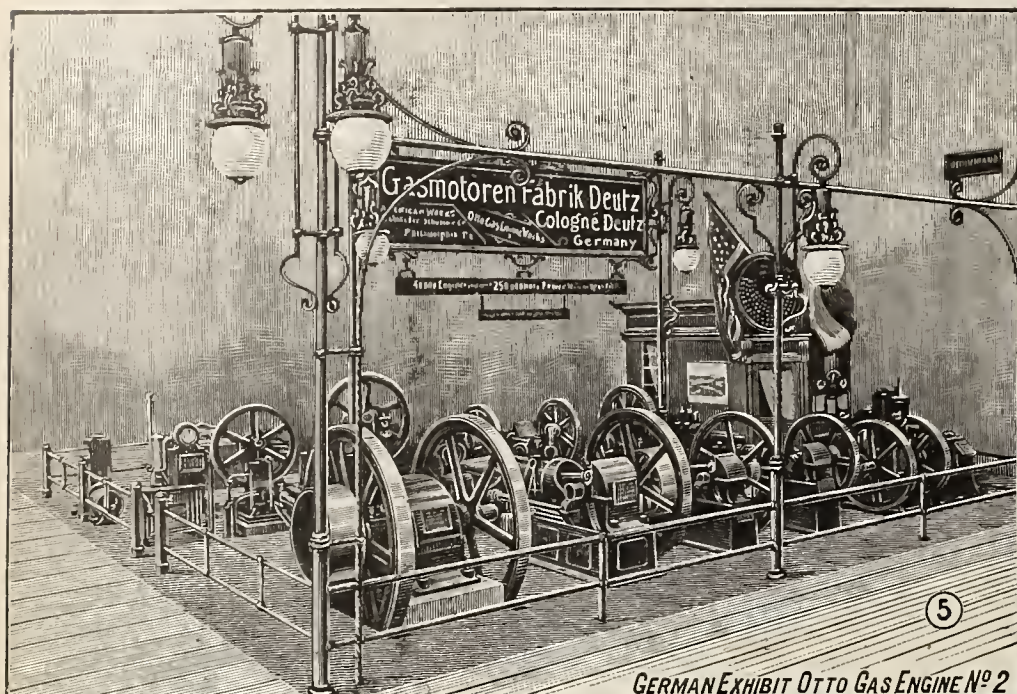
### THE OTTO GAS ENGINE AT THE COLUMBIAN EXPOSITION.

The attentive visitor at the World's Fair cannot have failed to notice the large number of gas engines exhibited by almost all of the nations represented

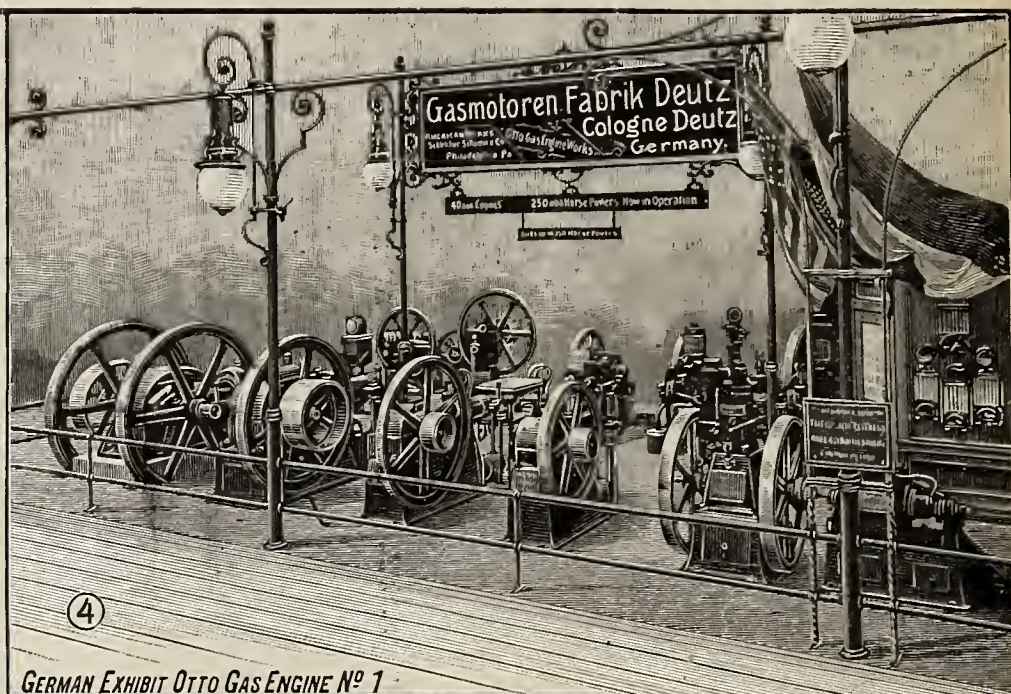
adaptations for gasoline and petroleum, has been developed and matured, and has formed so large a group that if all the various engines had been collected in one building, it would have required one of quite large dimensions.

Germany was specially prolific in its productions of

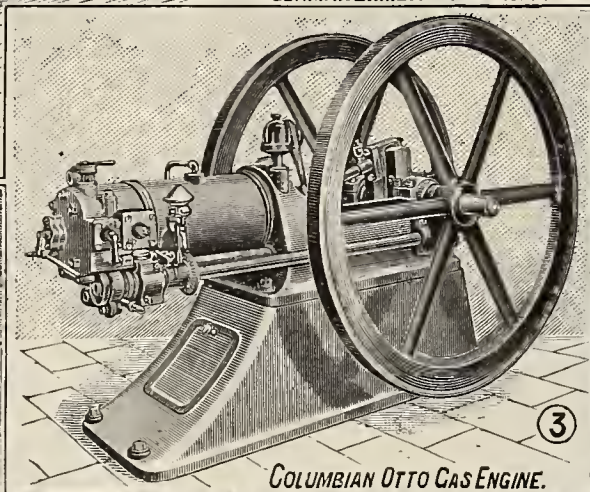
uses, at the Centennial Exhibition, over seventeen years ago, and which have ever since been prominently before the public. The Otto has had a most remarkable growth, and has been introduced in many parts of the civilized world, and in many countries special works have been erected solely for the manufacture of



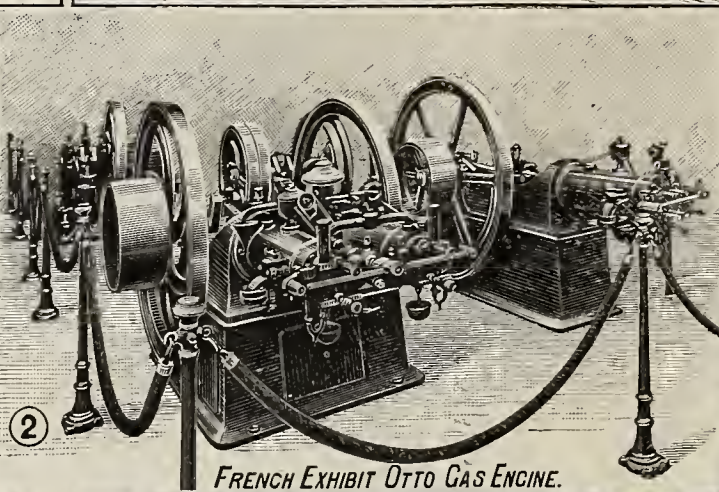
GERMAN EXHIBIT OTTO GAS ENGINE No 2



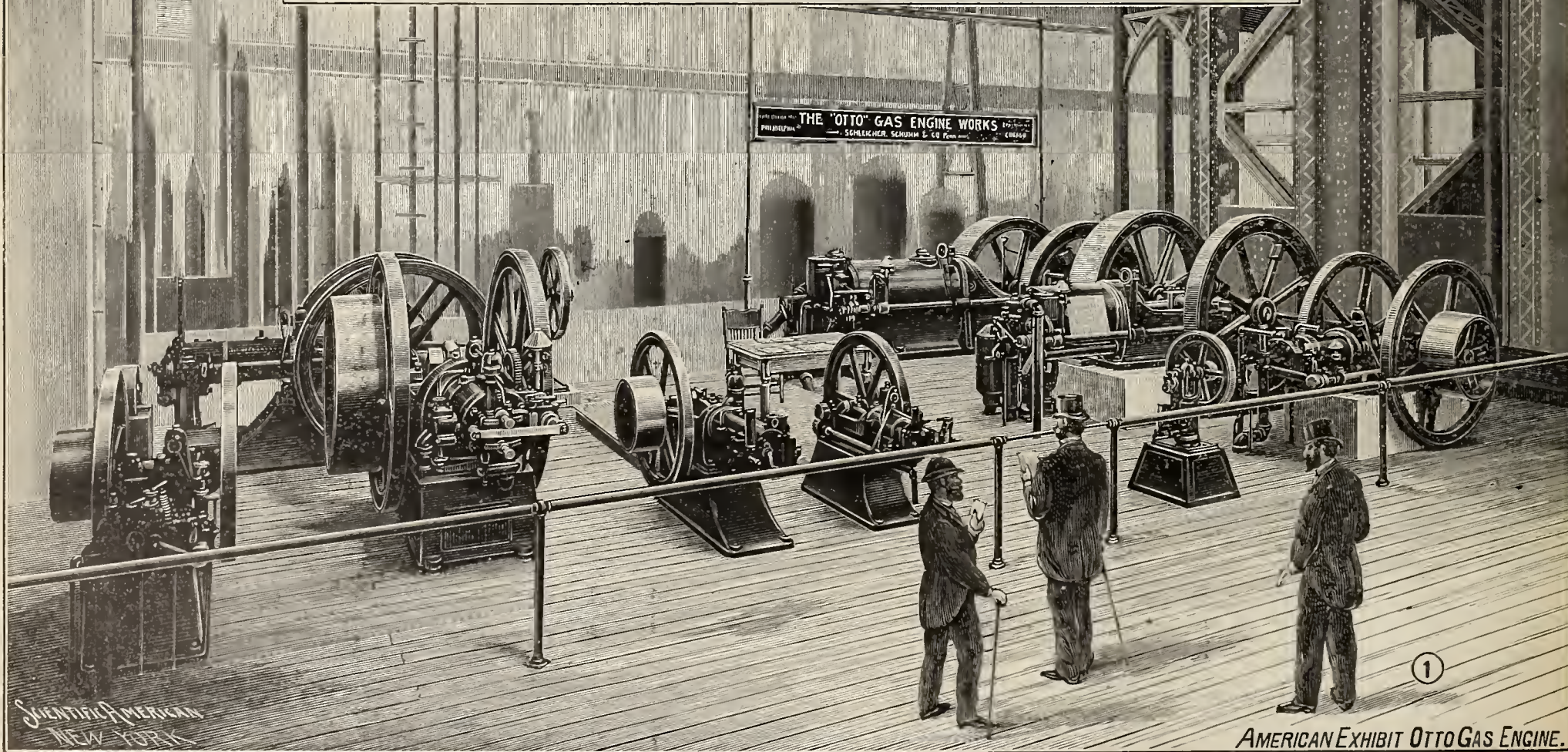
GERMAN EXHIBIT OTTO GAS ENGINE No 1



COLUMBIAN OTTO GAS ENGINE.



FRENCH EXHIBIT OTTO GAS ENGINE.



AMERICAN EXHIBIT OTTO GAS ENGINE.

#### EXHIBITS OF THE OTTO GAS ENGINE AT THE COLUMBIAN EXPOSITION.

there, and involuntarily to draw comparison with the small beginning this industry showed at our Centennial Exposition in 1876. Similar to the advance made in electric lighting and the telephone, which at the Centennial were exhibited in their infantile state, and which have grown since so as to fill a building for themselves, so the gas engine, with its varieties of

this kind, as well as England, while France, Russia and Spain were also represented, without mentioning the exhibits of numerous American gas and gasoline engine companies. In this line of industry the Otto Gas, Gasoline and Petroleum Engines have always occupied a very prominent position, and it was they who marked the birth of this new motor, for practical

gas engines under the patents of the late Dr. Nicolaus A. Otto, and under such other patents as have been subsequently taken out by his successors, and which are the common property of all the various companies interested in this particular manufacture. We here illustrate some of the more important exhibits.

The German Gas Engine Works made an especially



ereditable exhibit of some 10 engines, which illustrated the various methods of ignition, such as slide valve, electric and magnetic ignition, which were gradually developed in their works and which illustrated the modern practices in gas engine building. Some engines were shown with dynamos combined and attached to the engine shaft; others were petroleum engines, but all showing the extremely high finish and care of details which almost universally characterized all the German exhibits at the Fair. The German works are located at Deutz, near Cologne, and employ over 1,000 hands, having a capacity of 1,500 engines a year, and the cash capital employed is \$1,500,000. The Paris Otto Gas Engine Works also make a fine exhibit, though of much smaller dimensions and exhibiting but a few types of engines. Their offices are located at 15 Avenue de l'Opera and their works employ over 200 hands. As may have been expected, the American manufacturers of the Otto Gas Engine at Philadelphia have attracted great attention by the large varieties of engines shown, and specially by the extremely low gas consumption of 16.5 cubic feet per actual horse power per hour, which test was submitted to the judges and offered for verification by practical tests.

The American exhibit included an engine of 120-horse power, as well as one of 60-horse power. The interesting feature of these large engines consisted in self-starting apparatus, which materially differed from any similar device heretofore made. The exhibit also contained engines especially designed for running idle at an extremely low gas consumption or expense for friction, and furthermore possessed many interesting varieties of designs, including vertical engines, twin cylinder as well as the ordinary horizontal type. Most sizes are available for gaseous fuel (coal gas, natural gas or producer gas) or for liquid fuel (gasoline and petroleum). This liquid fuel has widened the market of this kind of motor very largely, and made the engines available for country uses for farming as well as manufacturing. The Philadelphia house also exhibited a portable engine for farm uses in the agricultural annex. Cost of running such power is very attractive to the farmers, being as low as 1 cent per horse power per hour at the usual retail cost of gasoline.

The Columbian Style Otto Engine was brought out specially for the Columbian year, and intended to embody the best devices known at the present time, and is the special pride of the Philadelphia firm. Its important feature consists in having all valves or all movable parts located in separate casings which drop out of pockets left in the main casting of the engine cylinder. In this manner the wear and tear affect pieces that can be taken out, and which are independent of the main casting of the engine; and thus the engine may be subjected practically to an almost indefinite amount of use, as the movable parts may be renewed from time to time as they become worn.

The products of the Otto Gas Engine Works of Philadelphia can be said to be the practical results of over twenty years' experience in the gas engine business, acquired not only by the practical work carried on at their Philadelphia shops, but through the reports sent to them by their correspondents in other countries with whom they have a common interest. Their shops at Philadelphia have a capacity of 800 engines a year, and their representatives are in every market in the United States, besides they own branch houses and offices in Chicago, Omaha, Indianapolis, Pittsburg, Boston and New York.

Exports of clover seed from New York during the week ending November 25 amounted to 5,152 bags. From September 1 to November 25 the exports amounted to 90,512 bags, compared with 13,062 bags in 1892.

## OUR GREATEST WATERWAYS.

Emory R. Johnson, Ph. D., is a specialist upon the general subject of transportation, and lectures upon topics connected therewith in the Wharton School of Finance of the University of Pennsylvania.

In all of his writings Dr. Johnson refers to the lakes as "not only our greatest waterway, but the most important inland highway of commerce in the world." "The public is no longer apathetic," he says, "concerning the extension and wider use of inland waterways. The steadily increasing demand for cheap rates has led shippers to increase the volume of water traffic, and the liberal policy which congress has pursued in the improvement of natural water routes has made possible the rapid growth of this inland commerce."

"The statistics of the traffic on our more important natural waterways show this in a striking way. During the census year 1889, the Ohio River above Cincinnati, including its branches, had a fleet of 5,214 boats and barges, by means of which 10,744,063 tons of freight, mostly coal, were carried. The ton mileage of this freight was over two million ton miles, or 27-10 per cent. of the ton mileage of the rail traffic of the

the equivalent of the Mississippi River and its tributaries.

"The total tonnage on these three trunk lines, whose combined length is 1,605 miles, was 114,135,558 tons; the four waterways named carried very nearly the same amount—112,916,233 tons. But this is comparing tonnage; were the ton mileage of each contrasted the waterways would make a much larger showing than the railroads."

## THE CHICAGO AUTOMATIC SCALE.

The Chicago Automatic Scale, which was exhibited in Machinery Hall, main building at the World's Columbian Exposition, is the only scale that was awarded a medal on scales in use more than two years. The judges visited two mills in Chicago where this scale was in use and awarded it a medal and diploma.

The illustration given herewith shows the exhibit of the Chicago Automatic Scale Co. at the World's Fair. In the foreground at the right is shown a 2-pound package scale made by this company for packing Graham, buckwheat, cerealine and any other products which it is desired to put up in small packages. The scales are made with capacities of 1 to 15 pounds.

In front at the left is a one-half-bushel automatic scale. This is the size used by a great many millers. It has a weighing capacity of 250 bushels an hour, and its action is controlled automatically. It is very simple and any one can use it. It has but two valves and when either is open the other is closed. It has no complex parts to get out of order. In the rear at the left is a two-bushel automatic scale and in the center is shown a bushel scale, all of the same make and pattern. The one-bushel automatic scale was shown in operation, its hopper being supplied from the garner above it to which the grain was elevated by the elevator in the rear. This scale is made in sizes ranging from one-half to ten bushels.

All scales are sold under a guarantee that they will do the work claimed, so purchasers assume no risk. Any additional information can be secured of the Chicago Automatic Scale Co., 316 Chamber of Commerce, Chicago.

## HOG'S FOOD VERSUS MAN'S FOOD.

Letters to hand by last English mail report sales of good Russian wheat in Liverpool at 4s. 9d. per 100 pounds, while sales of peas were recorded in the same market at 5s. 4d. per 100 pounds, showing to what depths of depression the wheat market has descended when the price of hog feed is higher than that of wheat; and even at the unprecedentedly low values which the latter is commanding, the offerings are largely in excess of the demand. An extract from a letter dated Liverpool, November 11, says: "I thought American wheat was at its lowest a few weeks ago, but the influx of Russian upset my calculations altogether, and I have now given up prophesying how far prices will still drop." Another batch of letters received from Liverpool by a firm here were of the bluest possible nature, reporting sales of No. 1 hard Manitoba wheat in Liverpool at equal to 66½ cents here. It is to be hoped that this is the darkest hour before the dawn, and that the prince of cereals will not have to bear the stigma of being of less value than that of hog feed much longer. One thing is certain, and that is the lower prices go now the greater will be their exaltation later on. But how much later? That is the question again.—*Montreal Trade Bulletin*.

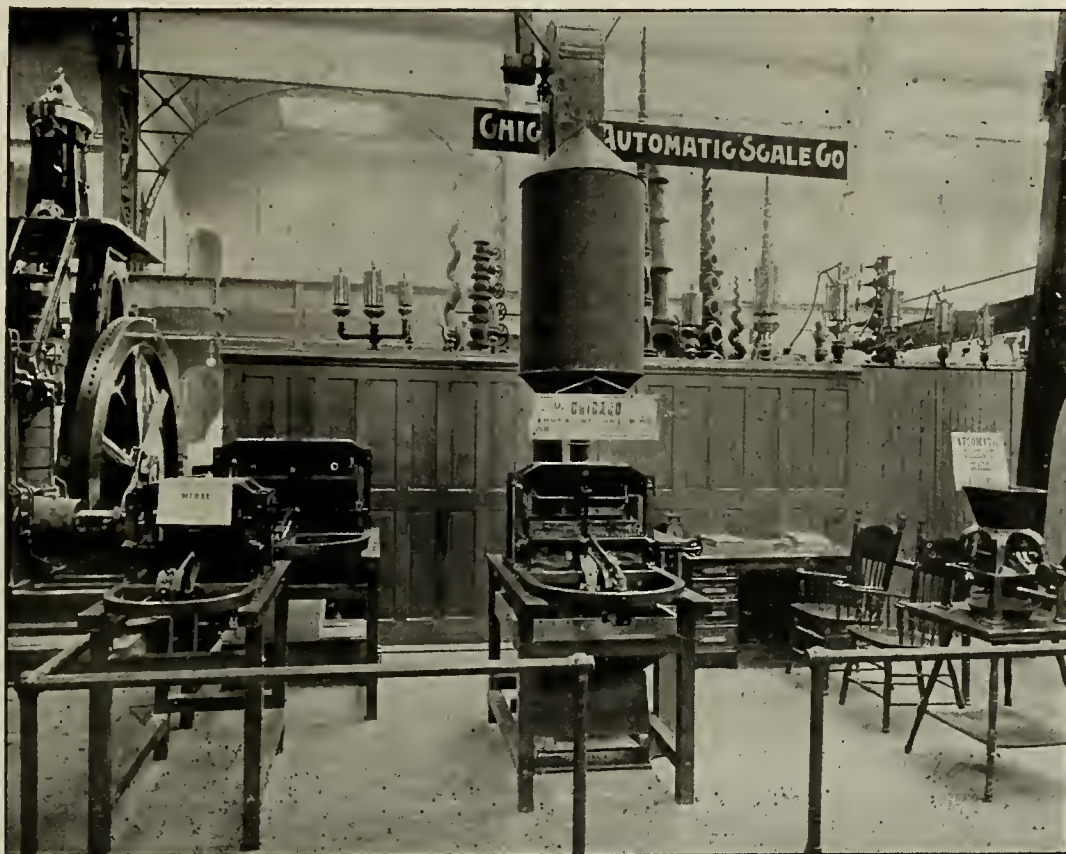


EXHIBIT OF THE CHICAGO AUTOMATIC SCALE CO., AT THE WORLD'S FAIR.

entire United States during the year ending 1890. The freight on the rivers of the Mississippi Valley in 1890 was placed at 31,050,058 tons. This is about 5 per cent. of the tonnage of the railroads for the same year, and is probably less than the amount actually transported. The freight traffic on the Hudson River, during the same year was 15,000,000 tons, or, including the 3,500,000 tons that it received from the state canals of New York and floated to tidewater, 18,500,000 tons—a sum nearly equal to 3 per cent. of the total rail freight.

"On the Great Lakes the traffic is enormous. During the year ended June 30, 1892, 10,107,603 tons of freight passed St. Mary's lock, between Lake Superior and Lake Huron, en route for such distant ports as Chicago, Cleveland, Buffalo and Liverpool. The tonnage of the Great Lakes is equal to 10 per cent. of that carried by all our railroads, while the ton mileage of this lake freight is fully 25 per cent. of that of the railroads."

"The magnitude of the traffic on the important inland waterways of the United States is well illustrated by the following comparison: The Pennsylvania railroad, on the 459 miles of its main line, the world's greatest freight carrier, had a traffic of 69,036,245 tons in 1890, a sum a little larger than the freight on the Great Lakes and New York canals. The Reading's main line, 327 miles in length, had a traffic of 15,625,482 tons, nearly the same as the Hudson River. The New York Central & Hudson River Railroad carried on the 849 miles of its roads 29,473,879 tons, practically



### THE MADDOX COTTON AND WIRE BELTING.

The Maddox Cotton and Wire Belting illustrated herewith is made of cables of steel wire and cotton woven solidly together. It is said to be thoroughly filled with a permanent water and oil proof composition, and is not affected any by water, steam, dampness, oil, grease, vapors of acids or chemicals, heat, dryness, dust, changes of climate or weather. It will not stretch or slip even when wet. It will not rot, crack or mildew, or get hard and stiff. It does not require any oils, grease or other belt compositions to be applied to it, nor any special care, but will always keep flexible, unchanged in nature. It will stand hard work and rough usage, and will last long.

The Maddox Cotton and Wire Belting is made of soft steel wire and cotton woven solid together, without any plies to pull apart. Each cable is composed of six small wires twisted together into a cable or rope; they are put lengthwise in the belt, about one-eighth of an inch apart, forming part of the warp. The weaving in of the cotton woof or filling solid, corrugates the cables, or bends them back and forth through the thickness of the belt, as is shown by the dark line in the sectional cut, thereby giving the belt great flexibility and tremendous strength and toughness, making it impossible for the cables to break or pull out, or for the belt to stretch. The cables are completely covered up by the cotton, and do not come in contact with the pulleys at all. The rough surface given to the belt by the cotton forms an elastic, rough face to it that causes it to take a tenacious hold on the pulleys, preventing slipping and the forming of air cushions between the belt and the pulleys, and enables it to transmit more power, and to give a more steady, uniform motion and speed to machinery. Any additional information can be secured by addressing H. N. Green, General Agent, 12 Wooster street, New York.

### FARM MORTGAGES.

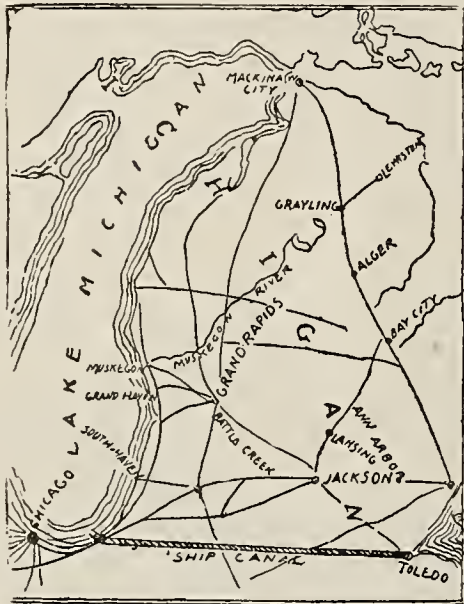
The *American Agriculturist* says: "Nine-tenths of our farms are mortgaged for all they are worth." This statement has been made so often that the general impression among all classes of people is that it represents the facts. Nothing could be further from the real truth. But not until the census of farms, homes and mortgages was taken in 1890 was it possible to get at the truth on this subject. These returns are now sufficiently compiled to warrant the following startling statements: Three-quarters of all the farms in the United States are owned free of incumbrance. Only one-fourth of the total number of farms in the United States are mortgaged. Or, to express it more specifically, out of every hundred American farms more than 70 are fully paid for and less than 30 are mortgaged. The average mortgage represents only about one-third the value of the farm upon which it is secured. The total amount of farm mortgages in the whole country is hardly one-tenth of the total value of all the farms. In 1880 nearly one-fifth of the mortgaged indebtedness rested on farms, but in 1890 farm mortgages represented only one-seventh of the country's indebtedness on real estate. Out of every 100 families on American farms in 1890 47 owned their farms free of mortgage, 20 owned but with incumbrance, and 32 hired the farms they lived on and worked. Of those who cultivated their own farms 70 per cent. were owned without incumbrance, and only 30 per cent. had mortgages. Of the farms occupied by tenants less than 10 per cent. were incumbered. Four-fifths of the amount of debt on the farms and homes were incurred for the commendable purpose of buying and improving the property and a like proportion of the number of farms and homes were mortgaged for the same purpose.

The article concludes with the following statement: Certain it is that enough has been set forth herein—most of it for first time—to demonstrate that the facts about farm mortgages have been grossly distorted and exaggerated. The indications now are that the final figures will show that over two-thirds of our 4,500,000

farms are owned free of debt and that all the mortgages on actual farms in the United States to-day do not exceed the value of one year's hay crop. The whole truth will be known when the census is completed, but enough is now done to indicate that the final result will differ from the above conclusions in amount, rather than in proportions. A revulsion in public sentiment favorable to agriculture should follow a widespread discussion of these facts.—*Market Record*.

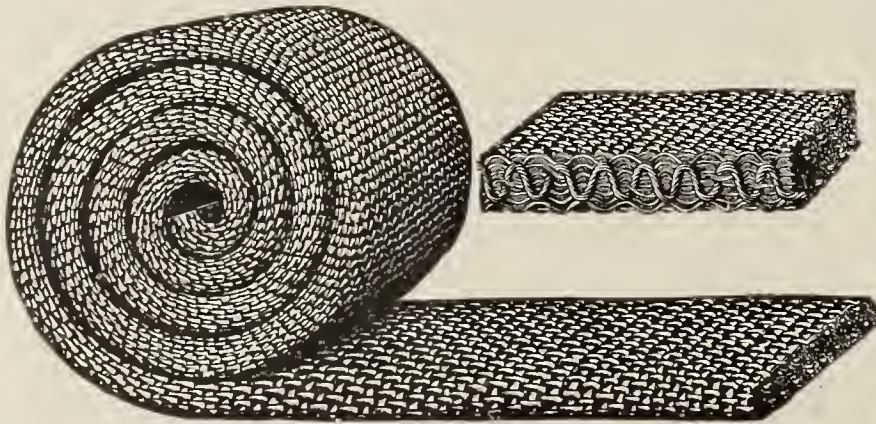
### TO CONNECT LAKES ERIE AND MICHIGAN.

The Hennepin Canal, which is now being constructed, will, to all practical purposes, place the



ROUTE OF PROPOSED CANAL.

Mississippi River cities nearer the Atlantic seaboard. Great as the value of the Hennepin Canal will be to the great West and Chicago, it is small as compared with the untold possibilities of future greatness for Chicago, with a ship canal which can be built from the south end of Lake Michigan to the west end of Lake Erie at Toledo. Such a canal would place Chicago 550 miles nearer the Atlantic, writes a Chicago enthusiast, and transportation statistics show that the saving in freight charges alone would pay 5 per cent. on an investment of \$50,000,000, a sum sufficient to construct a ship canal from Chicago to Toledo, a distance of 140 miles. In addition to the saving of freight charges the saving of time, interest and in-



THE MADDOX COTTON AND WIRE BELT.

surance, and also the saving of wreckage and loss consequent upon a voyage through the three great stormy lakes, with the early and long closing of navigation at the North straits, would make an aggregate of savings sufficient to render the cost of such a canal a profitable investment. Nor do these figures and estimates standing alone indicate the ultimate triumph of such a ship canal, as the increase of business for Chicago and vicinity would carry the profits and advantages accruing beyond the possibility of computation.

Broom corn, valued at \$29,806, was exported during the month of October, against an amount valued at \$17,593 in October preceding; and during the ten months ending with October broom corn, valued at \$154,614, was exported, compared with an amount valued at \$97,147 exported during the corresponding months of the year preceding.

### HOW MANY POUNDS IN A TON?

How many pounds in a ton, 2,000 or 2,240? is a question which has been bothering a jury in Judge Slover's court at Kansas City in the suit of W. H. Harris & Co., grain merchants of this city, against Fowler, McVitie & Co. and Ball, Hutchings & Co., steamboat agents at Galveston, Tex.

In October, 1892, during the season of heavy grain exportations to Mexico, the Kansas City firm, by telegraph, chartered the steamer "Tangier" to carry a cargo of corn from Galveston to Vera Cruz, Mexico. The carrying capacity of the vessel was declared by the Galveston agents to be 2,450 tons. While the ship was being loaded a dispute arose as to the amount of the grain to be transported, the representatives of Harris & Co. claiming 2,420 tons of 2,000 pounds each were to be the cargo, while the agent of the boat contended that it was to be 2,450 English or shipping tons of 2,240 pounds each.

After a wait of several days during which unsuccessful efforts were made to reach an agreement, the vessel put to sea. Shortly afterward Ball, Hutchings & Co. drew on Harris & Co. for \$816 alleged to be due for demurrage, dead freight and damage. By dead freight was meant the difference between the cargo and the capacity of the vessel and by demurrage, the delay in starting. Harris & Co. paid the draft under written protest and recently tried to convince the jury that a Kansas City ton weighs just 2,000 pounds.

### THE CHICAGO GRAIN ELEVATORS COMPANY.

The ordinary general meeting of the City of Chicago Grain Elevators, Limited, was held November 21 in London, under the presidency of Mr. John Aste, who, in moving the adoption of the report, said that while the directors had satisfaction in having been able to pay full interest on the debentures to provide for the sinking fund out of the earnings for the year ending May 31, 1893, they regretted that they were again unable to make any distribution among the shareholders. The quantity of grain warehoused during the current year had been over 35 o/o above that of the preceding year, but for various reasons this had not resulted in any practical benefit to the company.

Since the formation of the company it had become evident that a more rapid change than was expected had taken place in the mode of conducting elevator business, and the American committee some time since came to the conclusion that it would be desirable in the general interests of the company to convert it into an American company. After the board had had the matter before them at several meetings it was thought desirable to submit the scheme to some of the principal share and debenture holders, resulting in a committee of four appointed to consider the scheme with the directors. After some modifications, these conferences resulted in the scheme of rearrangement, which had the approval of large share and debenture holders. The American committee were confident that good results would follow the rearrangement. Throughout they had

shown their faith in the future of the company, and had given a preference to the English shareholders. The preference shareholders had been again safeguarded so far as payment of their interest was concerned, by the creation of a reserve fund in prosperous years which would be equal to two years' dividend.

The report and accounts were adopted, and a resolution was passed unanimously authorizing the directors to affix the company's seal to an agreement in terms of the draft submitted to the meeting for the conditional transfer of the property to the proposed new American company.

Thieves are reported to have been stealing wheat north and south of the town of Miller, S. D. The owners have been holding the grain for higher prices. The thieving has been going on for some time, but measures will be taken to stop it.



## OFFICE OF COMMON CARRIERS.

In the seventh annual report of the Interstate Commerce Commission just issued, attention is called to the peculiar office of common carriers and the dependence of every occupation upon their facilities; the right of every person to receive just and equal treatment in all that pertains to public transportation, and the paramount purpose of regulating enactments to secure to the people the actual enjoyment of this right. There must be a common and public rate, *prima facie* just and reasonable, which measures the lawful charge of the carrier.

Two classes of questions are involved in the consideration of a rate; one relates to the methods by which the justice and reasonableness of a rate is determined; the other to the measures by which observance of that rate is to be secured. Departure from the established tariff includes the offenses of rate cutting, rebates, under-billing, false weighing, false classification, and endless other devices by which unjust discrimination is effected. The only effective mode of dealing with discriminations arising through departure from the public rate is to place them in the category of criminal misdemeanors. Any redress by means of civil action for damages is manifestly inadequate. If such offenses escape detection and punishment, it is not because of defects and weakness in the criminal machinery for that purpose, but because those charged with the administration of criminal law are unable to enforce it against this class of offenders.

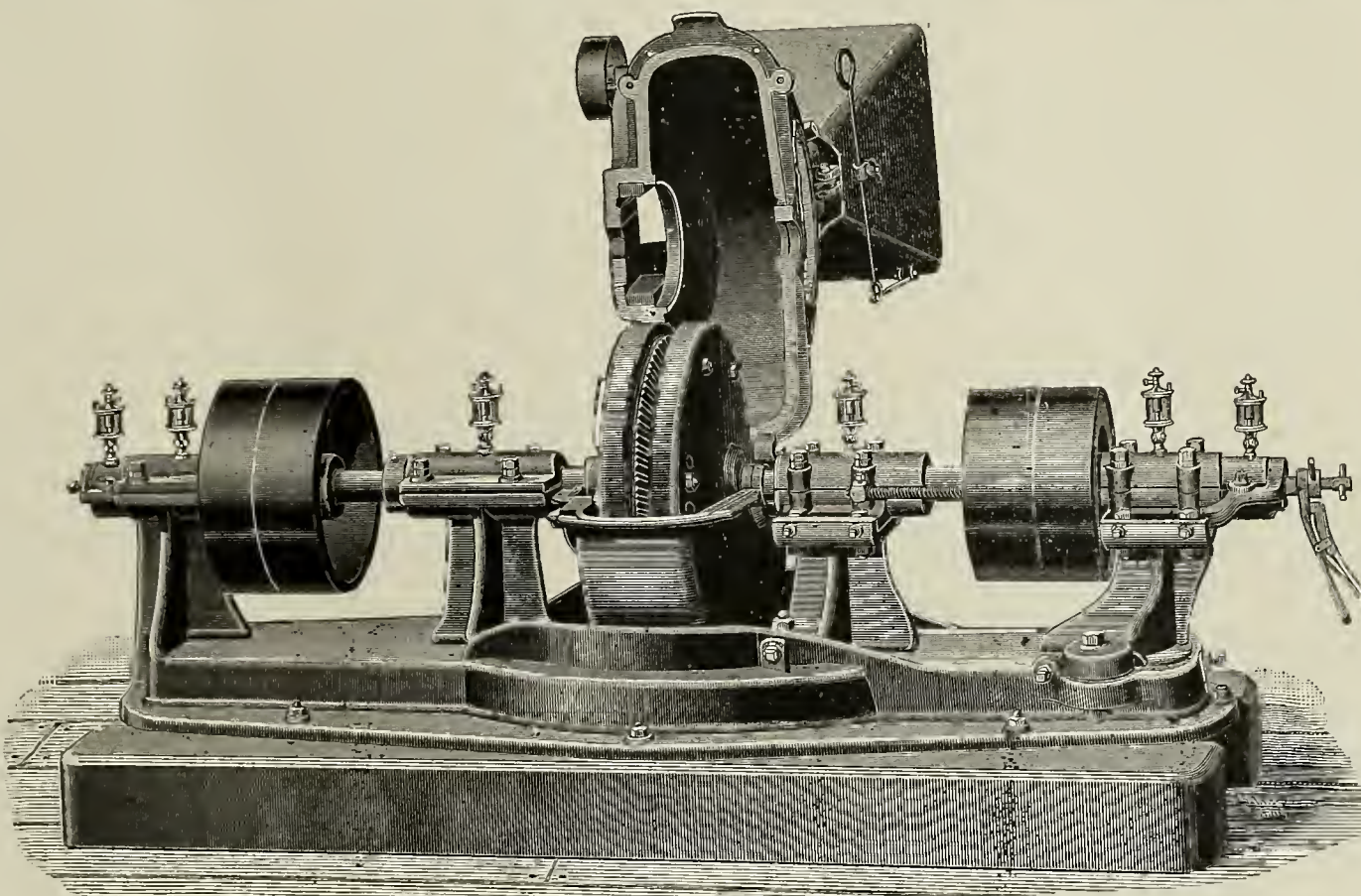
In cases arising under the act to regulate commerce the duty does not consist in determining what constitutes a criminal act, but in uncovering the guilty transaction and bringing to justice those who engaged in it. That the public tariff charges are frequently departed from in particular localities, and that rebates are paid and other prohibitions of the statute disregarded, is believed by many to be true. The legal truth of these violations may not be obtainable, yet the fact of their occurrence is a moral certainty. To attempt the extermination of illegal preferences by executing penal provisions of the act, to ferret out the vast number of condemned transactions, to discover the parties who participate in them and secure legal evidence of their guilt and prosecute them to conviction and punishment is, of course, a difficult undertaking. In view of these facts it may be suitable for Congress to consider whether legislation should not seek to lessen the evils of secret discriminations by endeavoring to remove their cause.

With reference to the methods of correcting wrongdoing which results from making and adhering to unjust rates, the commission says the importance of this subject can hardly be exaggerated. It involves the investigation of existing tariff rates and authority for their alteration when found excessive or unequal. These tariffs, or standards of compensation, are devised by the railroads themselves and represent their notions of proper remuneration, save as they have been corrected to some extent through the agency of this commission. The great body of producers and consumers who are so vitally affected by the cost of transportation, and completely dependent upon this unnecessary service, have no voice in fixing the scale of charges, and little power to prevent exactions or inequality, except as they may demand the intervention of federal authority. There is a growing con-

viction of national duty in this regard, and the notion that the strong arm of government should hold the balance of power between the carriers and the people has taken a firm hold upon public opinion. To investigate these tariffs require their correction when ascertained to be unfair or oppressive, and determine what are just and reasonable rates for public carriage is a governmental function of the highest utility. Transportation is a constant and universal necessity, and the state is bound to see that the terms upon which it is furnished are not burdensome or unequal.

## GRADING GRAIN ON THE PACIFIC COAST.

There is widespread dissatisfaction among the grain buyers of the Big Bend over the manner in which the Tacoma exporters are grading down the wheat shipped to them, says the *Times* of Davenport, Wash. The conviction is daily gaining strength that the Tacoma people have entered an unholy combine to grade all wheat below what it is actually worth. This is not mere supposition, for facts are almost daily adduced, which encourage this belief, and Big Bend



THE SCIENTIFIC FEED MILL OF THE FOOS MANUFACTURING CO., SPRINGFIELD, O.

buyers who have paid dearly for being in the field this season, are getting wrathful.

Portland buyers pay the same price for wheat and grade it much more satisfactorily, notwithstanding the fact that they are obliged to pay 2½ cents per bushel more tonnage on account of the Columbia River. As a result, most of the grain in the future will be shipped to that city. There is something wrong when Portland can grade wheat so much better and yet pay this additional tonnage. A number of instances have occurred recently where two or three carloads of grain were shipped to Tacoma, all threshed from the same field, and of the same quality and character, and yet the returns would classify them as two or three distinct kinds of grain, and possibly one would be dry, one wet, and another smutty. One grain dealer shipped a car of last year's wheat, which was graded down and reported too soft.

It is poor policy for Tacoma dealers to impose on our buyers in the way they have been doing recently, and to the extent of forcing them to seek new markets. They should not presume too far on the fact that Tacoma is the natural outlet to our grain fields.

Reputation, reputation, sighed Roderigo. Business, business, is the modern cry. You will find the AMERICAN ELEVATOR AND GRAIN TRADE quite a help to you in your business if you are in any way connected with the grain or hay interests. See our guessing contest ticket in this issue.

## THE SCIENTIFIC FEED MILL.

During the last few years many millers have withdrawn from the feed grinding business and, as the demand for feed is continually growing, the elevator men have naturally undertaken to help supply it. Many country elevator men have added a feed mill during recent years, and every one of them has found it a profitable investment. The feed business is still growing and the time is not far distant when every elevator will have a feed mill operated in connection with it.

The illustration given herewith shows the Scientific Mill, with the upper case thrown back, showing the interior of mill. There are two reducing discs, both of which revolve, each in opposite direction from the other, one pulley being driven by a straight, the other by a crossed belt. The small pulley is driven by a belt from countershaft and operates the feed roll by which the material is fed regularly into the mill, the amount being regulated by a ratchet and pawl. The material, which must first be reduced to pieces not larger than one-inch cubes, passes from the feed roll and drops to the conveyor on the main shaft, and entering the discs is thrown violently against the reduc-

ing surfaces back and forth; and the particles treated in this way and by contact with themselves are quickly reduced to powder, and pass from between the discs in every direction against the case covering the discs; after which the current of air carries the product through the discharge opening below. The upper case or covering being hinged to the lower, can be easily raised and the discs or interior of mill quickly examined or cleaned when desired. All joints are closely fitted and carefully packed to prevent escape of powdered material when mill is in operation.

This mill has a quick release, which is a great convenience, saving much time and annoyance, as it is only

necessary to set plates once for certain degree of fineness, which need not be disturbed unless it is desired to change the quality of work. When stopping mill the release lever is given a half turn backward, which allows the plates to separate, and when starting again the release lever is brought into position and plates are set for desired quality of work without further adjusting.

This mill also has adjustable base and boxes, so that one shaft and head can be raised or lowered, or moved one side or the other and brought in perfect train to the other. The value of these features will be recognized at once, as to do proper work the plates in these mills must be in perfect train, which is disturbed, as the boxes wear unless some provision is made for adjustment. Any additional information can be secured by addressing the Foos Manufacturing Company, Springfield, O.

Grain land in the vicinity of Visalia, Cal., is in active demand and rents have advanced. And this is the case in the face of abnormally low markets for wheat, barley and corn.

Emory E. Nutt of Sidney, O., reports that while talking with one of his customers, a very prosperous farmer, he asked him his experience in feeding his wheat to hogs. The farmer replied that one bushel of wheat would make 14 pounds of pork. This is similar to the experience of farmers in Dakota who have tried the same experiment.



# COMMUNICATED

[We invite correspondence from every one in any way interested in the grain trade, on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

## SOLD ELEVATOR—WILL BUILD.

*Editor American Elevator and Grain Trade:*—The Van Dusen Elevator at Redwood Falls, Minn., burned down Nov. 5, 1893. This is the second time within a year. The contents were about 15,000 bushels of wheat, 4,000 bushels of flax and some oats. C. W. George has sold his 40,000-bushel steam elevator to the Van Dusen firm, taking as a part of the trade the foundation and lease of ground of the burned elevator. Mr. George will build an elevator on this ground in the summer, so as to be ready for the crop of 1894.

Yours truly, REDWOOD.

## COMPLETED NEW ELEVATOR.

*Editor American Elevator and Grain Trade:*—Messrs. H. A. Reitz and N. R. Maust are erecting an elevator in West Salisbury, Pa. The capacity of the elevator is 20,000 bushels of grain and 30 tons of sacked flour and feed. Machinery will be used for loading and unloading cars. Inside machinery consists of choppers, crushers, corn shellers, grain cleaning machinery, hopper scales, etc. The elevator is now ready for business. The power is furnished by a 40-horse power engine. This the first and only elevator in Somerset county.

Very truly, A. H. SHUMAKER.  
Elk Lick, Pa.

## RAPID WEIGHING TO BLAME FOR SHORT-AGES.

*Editor American Elevator and Grain Trade:*—In reference to an article in your last issue relating to track scales and rapid weighing, allow me to cite the case of a steamer which loaded at the Detroit Railroad Elevator at Detroit, Mich., during this season, taking on a load of 65,000 bushels, which it unloaded at Buffalo.

I was told by one of the owners of the boat that this load of 65,000 bushels was weighed out in drafts of 100 bushels each, and that the weighing was done in three hours and thirteen minutes. At this rate the weighman had to fill his scale, weigh the load, enter up the weight and empty the scale nearly three and one-half times every minute during the entire time of unloading the cargo.

I am informed also that this rapid weighing at Buffalo is a common practice. May it not account for some of the shortages complained of, and doesn't this beat your track scale weigher?

Yours truly, A SUBSCRIBER.

## TO SUCCEED NORTH STORMS.

*Editor American Elevator and Grain Trade:*—I take the following from the *Journal News* which I think will be of interest to your readers:

"Arrangements have just been completed whereby the new firm of Harned, Clarke & Co., succeeds the late firm of North Storms & Co., in the grain and seed business, with offices at the old stand, No. 204 Upper First street. The members of this firm form a combination that is rarely excelled. The senior member, Dr. F. M. Harned, whose residence for the present is in Washington, Ind., is well known here and has had years of experience in different lines of business, principally in grain and milling interests, and is regarded by all who know him as one of the most successful men in Southern Indiana, due entirely to his clear-headed business qualifications and executive ability.

"Mr. W. P. Clarke, the second member of the firm, has spent the larger portion of his business career in Evansville. For a long period he was the right hand man of Bartlett, Kuhn & Co., in whose office he formed and developed the business qualifications he now possesses. For the past four years he has been the partner of the late Mr. North Storms, under the firm name of North Storms & Co., and he is entitled to his full

share of the credit for the splendid reputation and business built up by that firm.

"Mr. Albert Jones, the other member, is well known as one of the most successful traveling men in the grain and seed line that ever worked out of Evansville. For a number of years he was connected with the firm of Bartlett, Kuhn & Co., and the Evansville Grain Company and others, and his extensive acquaintance will bring lots of business to the new firm.

"Altogether the firm of Harned, Clarke & Co. starts out well equipped with money, brains and other facilities, and it remains only with them to exercise the energy they possess to make a success.

Very truly, READER.  
Evansville, Ind.

## OUR BOSTON LETTER.

*Editor American Elevator and Grain Trade:*—Markets have been dull and featureless all the month. With the closing of the lakes and outlook for little higher prices came the reduction of all-rail rates to the seaboard:

### RECEIPTS FOR NOVEMBER.

Articles.	1893.	1892.
Cotton Seed Meal, bushels.....	11,895	15,025
Corn, bushels.....	1,428,185	733,519
Wheat, bushels.....	1,026,373	425,532
Oats, bushels.....	641,276	924,557
Rye, bushels.....	2,350	8,435
Mill Feed, tons.....	4,545	4,027
Oatmeal, sacks.....	1,267	2,696
Oatmeal, barrels.....	6,094	3,618
Cornmeal, barrels.....	12,638	17,145
Barley, bushels.....	17,235	47,821
Malt, bushels.....	99,796	119,615
Hops, bales.....	2,351	608
Peas, bushels.....	6,252	42,969
Buckwheat, bushels.....	8,993	
Flour, barrels.....	131,279	169,446
Flour, sacks.....	210,967	260,350
Hay, cars.....		

### EXPORTS FOR NOVEMBER.

Articles.	1893.	1892.
Wheat, bushels.....	255,832	334,800
Corn, bushels.....	719,419	364,570
Oats, bushels.....	6,655	112,680
Peas, bushels.....	300	9,357
Buckwheat, bushels.....		
Cornmeal, barrels.....	9,123	4,727
Oatmeal, barrels.....	1,497	1,435
Oatmeal, sacks.....	949	2,040
Flour, sacks.....	153,477	207,180
Flour, barrels.....	43,112	35,304
Mill Feed, bags.....	8,438	
Hay, bales.....	89,241	

Mr. Henry B. Moore of J. E. Soper & Co., and Mr. Leroy Brown of Blaney, Brown & Co., were two of a party to the wilds of Maine last month. Mr. Moore shot a moose and Mr. Brown a deer. Mr. Charles A. Hall, formerly with C. Dorr & Son, has opened an office and started to do a feed commission business. Haynes & Tourtello of Maynard, Mass., grain dealers, have failed. J. A. Creighton of J. A. Creighton & Co., grain dealers of Thomaston, Me., died last month. His sons continue the business.

Yours, etc., BUNKER HILL.

## THE ORIGIN AND USE OF BARLEY.

*Editor American Elevator and Grain Trade:*—The principal grain raised in this country, besides rye and wheat, is barley. Its product, beer, is in demand and is consumed daily by all people. A short treatise upon the class *Hordeum*, to which the barley belongs, will perhaps therefore be of interest. It is odd that the original fatherland of this grain, which has been used by people since the first times, is not definitely known. Later authors presumed that barley was first known in Egypt or India. Others maintain that Sicily or Tartary is the birthplace of the same. Without doubt, however, one will not make a mistake in designating Asia as the land of the first origin of all kinds of grain.

In most Asiatic languages the name barley has the same significance as the name bread. In the countries between the rivers Euphrates and Tigris barley grew without any cultivation. From the times of Theophrastus and Pliny there was a species of barley cultivated, from which a very nutritious bread was made. One will make no mistake in accepting barley as the first grain which was largely cultivated. Professor Unger found barley in the bricks of a pyramid in Egypt, erected about the year 2570 B. C. In the old Egyptian mummies also there were found remains of barley. In the valley of the Nile barley

was sown and gives good results with two as well as with four rows.

Herodotus wrote: "No country produces as much grain as Babylonia." The leaves of wheat and barley are said to have been in that region often of a width of four fingers. Barley has been known in Europe since early times. The grain to-day is mostly cultivated in Roumania and, in fact, in the southern countries more than in the north. Barley was formerly the principal product of Greece. Of cereals, the Romans cultivated wheat and barley, especially the so-called summer and winter barley. During former times bread was made from barley, but later it was only used as a feeding stuff. Two-rowed barley was sown in January and February. The best variety was that from Carthage and Spain, which was harvested in April. Later wheat was sown more and more in Italy instead of barley. Since ancient times barley has been known to the Germans, who made beer of it, as did also the inhabitants of France.

Yours, WILHELM MUHLE.  
Hamburg, Germany.

## STOCKS AND GERMANY'S CROPS.

*Editor American Elevator and Grain Trade:*—During the past weeks our grain market has been as before, flat. Every week it becomes more apparent that there is an over-production of wheat. The quantity of wheat on passage to Europe increased still more during the past weeks. On the 20th of November there were 2,928,000 quarters on passage to England, compared with 2,854,000 quarters on passage November 13. To the continent there were 1,083,000 quarters on passage on November 20, compared with 1,071,000 quarters on passage November 13. The total number of quarters on passage on November 20 was 4,000,000, against 3,925,000 for November 13.

Of the 1,083,000 quarters for the continent 325,000 quarters were for France, 300,000 for Belgium, 175,000 for Holland, and the remainder for Germany and other countries. The condition of new seeds in Prussia is as follows: (No. 1 indicates very good, No. 2 indicates good, No. 3 indicates middling, No. 4 indicates bad, No. 5 indicates very bad.) Wheat in September was 2.5, in October 2.2, and in November 2.1. Rye in September was 2.5, in October 1.8, and in November 1.8.

Yours truly, WILHELM MUHLE.  
Hamburg, Germany.

## AN OPPORTUNITY FOR MAKERS OF GRAIN CLEANING MACHINERY.

*Editor American Elevator and Grain Trade:*—In connection with my communication which made its appearance in the September issue of your valued paper there appeared an editorial mention pointing out the necessity of having the trade pushed direct. I would suggest that efforts be made and no money be spared by the interested parties to take advantage of the favorable opportunity afforded by the forthcoming International Exhibition of Grain Cleaning and Grading Machinery, which is to be held in our city during several weeks from February 20 (February 8 the old style).

As intimated in the August issue of this paper, the exhibition is being organized in consequence of the government's decision to enforce stringent laws with a view to stop the generally low and often fraudulent grading of Russian export grain. The idea of such a measure belonged to the defunct Valerian Tshernyajeff, inspector of agriculture, and a member of the Imperial Free Economic Society, who since visiting the Centennial Exposition at Philadelphia had become a decided propagator of American improved implements and grain handling machinery. He most fervently pursued the advocacy of an improved grain grading system and the subject of the forthcoming exhibition became so popular both with the official world and the said economic society that the latter had decided to hold the exhibition in January, 1893. But Mr. Tshernyajeff's death and other unforeseen circumstances on the one side and the society's desire to insure a wider adhesion and a larger productiveness of the undertaking on the other, caused the delay of the exhibition until next February.

As incredible as it may seem it remains too true that there are in Russia but very few manufacturers of grain cleaning machinery who are really worth



mentioning. If the exposition were to comprise only machines of domestic manufacture it would prove a complete failure, *faute de combattants*, for want of exhibitors.

Our grain trade has known until quite recently but of one Russian, one German and one English fanning mill, one English cockle separator and trier, and one English screen. The American large sized grain cleaner, separator and grader and the oat clipper of the E. H. Pease Manufacturing Company opened up a new era. Then came Count Berg's ingenious invention as brought forth by the August issue of the AMERICAN ELEVATOR AND GRAIN TRADE to complete the collection of practical machinery of that line.

With the new rules and regulations becoming imperative all those old-fashioned machines which had been tolerated in former days, and which tend to maintain the old routine work whenever they are permitted to remain, must be supplanted by more powerful and substantial machinery to fit the urgent requirement and the daily increasing demand. The Economic Society's wide gate, giving access to almost a *tabula rasa* when foreign competitors are invited to write down what they claim for their respective machinery, will be thrown open very soon and those desirous of "striking the iron while it is hot" or "skimming the milk" will, of course, not fail to be present.

It should be borne in mind, however, that in our places new factories cannot be expected to spring up like mushrooms after a heavy rain, and that under the present condition watching the sun rise would be connected with the danger of having the eyes worn out by the mist. We have had too much experience with the primitive and slow grain cleaning method by means of the old-fashioned German colonists' fanning mill to continue that practice any longer. Let us have some modern time and labor saving machinery.

Very truly yours ALFRED F. BENDER.

St. Petersburg, Russia.

#### THE ERIE CANAL.

*Editor American Elevator and Grain Trade:*—Now that the friends of the Erie Canal are working once again for its improvement I wish to call attention to what I consider the best plan for increasing its usefulness.

"The reason why the Illinois steamer and consort system has been so readily indorsed by all practical canal men in the state of New York is explained by the following exhibit: The original Erie Canal boats' width 15 feet, length 80 feet, burthen 70 tons, draft 3½ feet; cost \$7,149,789. Enlargements from 1836 to its completion in 1862: Boats' width 17 feet 10 inches, length 97 feet, burthen 240 tons, draft 6 feet; cost \$44,465,411. Improvement on the Seymour plan, which is already well under way: Boats' width 17 feet 10 inches, length 191 feet, burthen 580 tons, draft 7 feet; cost only \$3,500,000.

"While the enlargement cost nearly \$45,000,000 to increase the capacity of the boat 170 tons, now one-thirteenth of that sum will increase the capacity of a double boat 340 tons. In other words, it will enable a double boat to carry 20,714 bushels corn, rye or flaxseed. This astonishing difference in the two improvements to the canal is accounted for by the latter improvement utilizing the capacity of the canal lengthwise. The boats are the same in width, but double in length.

"In ex-State Engineer Horatio Seymour's report of 1881, he mentioned such prominent canal authorities as Alonzo Richmond, Van R. Richmond, John B. Jervis and George Geddes, all favoring lengthening both tiers of locks between Lockport and Cohoes, so that a double boat could pass without uncoupling; also to raise the banks of the canal one foot and dredge it out another foot, except over aqueducts and culverts, which would allow boats to draw seven feet of water and leave two feet clearance under them. It was the universal opinion of all practical canal men then, and is now, that such an improvement to the Erie Canal would enable the steamer and consort system to solve the problem of cheap transportation.

"In 1884 the legislature adopted the Seymour plan of improving the Erie and Oswego Canals, and has from time to time appropriated funds to lengthen 39 locks on the Erie Canal and 10 on the Oswego Canal. In the meantime, the boatmen have built and put in commission 75 steamers of the most economical pat-

tern, and there are several more under construction.

"These steamers push and tow from three to five consorts each. Pushing one and towing two by a 100-foot hawser is the favorite method; this rig usually carrying west 500 tons of merchandise and bringing east 900 tons of grain, equal to 32,150 bushels of corn, rye or flaxseed; making 1,400 tons handled in a round trip; while by the latest improved steamers \$200 pays for fuel and engineers for a round trip, bringing the cost of moving the boats down to five cents per mile per boat, or about a quarter of a mill per ton per mile; to come down to fractions, it is just 28½ one-hundredths of a mill per ton per mile.

"Not only steamers and consorts are run in pairs, but also horse boats in the grain, lumber and merchandise trade are doubled, and in numerous cases three or four boats are coupled and handled successfully, although the boatmen are put to great expense and delay by having to uncouple their boats at the remaining short locks.

"The following is a startling exhibit, showing the present capacity of the Erie Canal between the locks:

"A double boat carries 480 tons, equal to 17,143 bushels of corn, rye or flaxseed; and with a continuous train of boats moving east at only 2½ miles per hour, a rig would pass a given point every minute: In one minute 17,143 bushels, in one hour 1,028,580, in one day 30,685,920. In 210 days of canal navigation 6,444,043,200.

"The facts are that at present everything pertaining to the Erie Canal, except the locks, is capable of floating the above amount of grain annually into the Hudson River. The above exhibit shows that in reality only the locking facilities need improving to enable the steamer, or Gov. Flower's trolley system, to carry all the grain that will ever be raised in the Northwest.

"The following exhibit shows the capacity of the Erie Canal after it is improved on the Seymour plan. This is determined by how quickly a double boat can be gotten through a lock, and it is possible by mechanical appliances to lock a rig in three minutes, thus: In three minutes 20,714 bushels, in one hour 414,280 bushels, in one day 9,942,000 bushels, in 210 days of navigation 2,087,971,200 bushels.

"This exhibit is based on the boats carrying corn, rye or flaxseed; wheat would be less, and oats or barley more.

"In conclusion, I wish to call your attention to the fact that for a number of years the Erie Canal has been laboring under disadvantages that would have ruined its railroad competitors. Think of canal grain having to pay 3½ cents a bushel elevator charges, when all-rail grain could be transferred for an eighth of one cent per bushel. Think of railroad corporations reducing their rate on wheat 5 cents a bushel from Buffalo to New York as soon as the canal is opened for business. Where would the railroads be if the state owned all the grain elevating facilities, and made the roads pay 2 cents a bushel over the cost of elevating grain? It is marvelous that the Erie Canal has survived, considering all the gigantic abuses it has been subjected to.

"Give the Erie Canal a show! Go right along with the original Seymour plan of improving the canal, which can be completed inside of three years for the slight sum of \$3,500,000."

All Western grain growers and shippers are directly interested in the improvement of the Erie, as it means lower rates to the seaboard. I trust none of them will lose an opportunity to say a good word for the great grain carrier and help along its improvement in every way possible.

Sincerely,  
New York, N. Y.

CAPT. M. DE PUY.

Barley malt aggregating 65 bushels was imported during October, against 65 bushels during October preceding; and during the ten months ending with October, 2,359 bushels, valued at \$2,872, were imported, compared with 1,202 bushels, valued at \$4,910, imported during the corresponding months of the year preceding. Of imported barley malt we re-exported none in October and none in October, 1892. We re-exported none during the ten months ending with October, compared with 1,191 bushels, valued at \$830, re-exported during the ten months ending with October, 1892.

#### GRAIN SPECULATION.

Senator Peffer gives a very curious explanation of the manner in which speculation on Boards of Trade depresses the prices of farm products. He has discovered, as a result of many months of investigation into the causes of agricultural depression, that "the constant trading in futures necessarily gives to the people the idea that there is more grain on hand than there is in fact. In other words, the world, judging from the market reports, understands that there is a much larger quantity of grain on hand than does really exist, and that of itself logically tends to lower prices."

The implication of this is that stocks of wheat have not been really increasing for months past. They have only seemed to increase. It is not actual wheat which is piled up at all market centers. It is wind which has accumulated there, and the system of speculation in vogue makes the whole world believe that these vast stores of wind are actually wheat which has to be paid for by somebody and for which storage room must be furnished. The statistics of supplies show that in Chicago elevators are stored more than 21,000,000 bushels of wheat; in New York more than 20,000,000 bushels; in Minneapolis and Duluth 20,000,000 bushels, and in other store houses, where it is immediately available for use, more than 40,000,000 bushels. Mr. Peffer's comfortable theory would lead the world to believe that these statistics are all wrong, and that no such quantities of wheat exist. The world's visible supply of wheat now is about 220,000,000 bushels. A year ago it was 196,000,000 bushels. Two years ago it was 133,000,000 bushels. Three years ago it was 91,000,000 bushels. These are the figures given by the best trade authorities. Does Mr. Peffer mean to say that these statistics are wrong and that the whole world has been deceived about them? Mr. Peffer does not say that there has been any deliberate misrepresentation in regard to these figures. His theory is that speculation has deceived the people about supplies. Mr. Armour, for instance, who is supposed to have about 15,000,000 bushels of wheat in his Chicago elevator, for which he has paid in cash nearly \$10,000,000, is likely to go down to the storehouse some day and discover that his good money has been paid out for nothing but wind, which has accumulated in his houses as the result of the speculation in futures which goes on daily in the Chicago wheat pit! When Mr. Armour makes this discovery, he will doubtless immediately join Mr. Peffer and Mr. Hatch in demanding the immediate abolition of speculation.

The only important result of this senatorial investigation into agricultural depression seems to be that it has once more proven, as has been done many times before, that a man with a hobby is incapacitated for fairly judging facts and conditions affecting his hobby.—*Kansas City Star*.

#### MILWAUKEE ELEVATOR RATES.

The Milwaukee Board of Trade has been laboring under the impression that Chicago has been especially favored in the line of grain insurance rates on stock in elevators. It recently announced that a committee would be sent to Chicago to look into the matter of rates and attempt to eliminate an element unfavorable to Milwaukee in the competition for grain business. Investigation develops the fact that elevator rates in Milwaukee are much lower than the rates through the Northwest, and notably in Minneapolis, St. Paul, Superior, Duluth and elsewhere, where the construction and protection are not inferior. The average rates in Chicago run from 1½ to 2½ per cent., but in many cases the elevators that rate the lowest are equipped throughout with automatic sprinklers and are unexposed.

A bill has been introduced by Senator Cullom which is intended to meet one of the weak points that experience has found in the Interstate Commerce act. The proposed amendment is intended to enforce the acceptance by one railroad of the traffic of another for the purpose of making a continuous line and for the further purpose of preventing railroads from discriminating as between roads in the acceptance of traffic.



### GRAIN INSPECTION IN MINNESOTA.

The eighth annual report of the Minnesota State Grain Inspection Department recently submitted to the Railroad and Warehouse Commission by Chief Inspector A. C. Clausen shows that the receipts of grain, which have been subject to inspection during the season just closed, have been as follows: At Minneapolis, 100,165 cars of wheat, 4,129 cars of corn, 4,639 cars of oats, 552 cars of rye, 3,919 cars of barley, 1,345 cars of flax: total, 115,279 cars. At Duluth, 65,741 cars of wheat, 493 cars of corn, 235 cars of oats, 131 cars of rye, 146 cars of barley, 579 cars of flax: total, 67,325 cars. At St. Paul, 990 cars of wheat, 251 cars of corn, 922 cars of oats, 8 cars of rye, 100 cars of barley, 229 cars of flax: total, 2,500 cars. At St. Cloud, 1,241 cars of wheat, making a grand total of 186,345 cars of all kinds of grain, or 123,107,050 bushels.

The inspections out of store during the same period were as follows: At Minneapolis, 43,714 cars of wheat, 1,034 cars of corn, 1,800 cars of oats, 330 cars of rye, 1,048 cars of barley and 910 cars of flaxseed: total, 48,836 cars. At Duluth, 1,405 cars of wheat, 518 cars of corn, 4 cars of oats, 6 cars of rye, 18 cars of barley and 6 cars of flaxseed: total, 1,957 cars. At St. Paul, 1,876 cars of wheat, 661 cars of corn, 867 cars of oats, 34 cars of rye and 1,125 cars of barley: total, 4,563 cars. At St. Cloud, none, making a grand total of 55,356 cars. In addition to the above there was inspected "out of" store into vessels at Duluth as follows: Wheat, 34,228,218 bushels; corn, 374,737 bushels; rye, 64,534 bushels; barley, 72,149 bushels; flaxseed, 345,897 bushels; being a total of 35,086,135 bushels.

The total financial receipts of the inspection and weighing department for the crop year (including \$2,172.04 interest on deposits) were \$131,286.26, and the expenditures were \$172,281.20, showing a deficit of \$40,994.84.

Mr. Clausen attributes this result to the reduction of the inspection fee from 20 to 15 cents per car, and 20 cents for weighing, together with the fact that the crop is lighter. At the close of the year, in August, 1892, he says the surplus was \$84,753.05, and in view of that the reduction was made to get rid of the surplus, and appears to have succeeded. He recommends that the fee be restored to 20 cents.

The wheat crop of last season in the territory naturally tributary to Northwestern markets was deficient in volume as compared with that of the preceding one, the result of the year's work in carloads received indicating a reduction of about 15 per cent. An extremely hot temperature during the latter half of August caught the wheat in its formative stage, preventing the heads from filling out well, and slightly pinched the berries, which resulted in a crop rich in quality, but lacking in weight. The situation was a somewhat anomalous one. The bad weather prevailing at a critical period of its growth had stunted the development of the grain, thus reducing its weight per bushel and therefore its milling yield, while the same conditions had been instrumental in largely increasing the normal percentage of "gluten," and thus presenting a rich crop full of flour-making qualities.

As a result of a hearing, at which all interests were fairly represented, the rules were amended by the adoption of the following clause: "Hard, flinty wheat, containing no appreciable mixture of soft wheat, may be admitted to the grades of No. 2 Northern and No. 3 Wheat, provided the test weight of the same is not more than one pound less than the minimum test weight required by the existing rules for said grades, and provided, further, that such wheat is in all other respects qualified for admission into said grades."

The experience and results of the year have vindicated the judgment of your honorable board in this important matter.

Mr. Clausen especially commends the practical working of the law of '93 requiring railroads to furnish police protection for cars until full delivery has been made, and then re-sealing after inspection before delivery. The number of reports of small shortages at the different weighmasters' bureaus have been reduced fully 60 per cent. during the operation of the sealing system, as compared with the number re-

corded during a similar period the year previous. The primary object of the country warehouse law was to extend the jurisdiction of the commission over the local markets of the state, where nine-tenths of the grain leaves the producers' hands, for the purpose of correcting the general evils which might prevail, and furnish the farmers with a tribunal before which complaints of injustice or oppression could be preferred. One of the prominent features of the law, and the only one which directly affects the work of this department, is found in section 5, which, briefly stated, provides that in case of a disagreement between the person delivering the grain and the local warehouseman as to the proper grade or dockage of the same, an average sample of at least three quarts of the grain in dispute may be taken by one or both parties and forwarded to the chief inspector at St. Paul, which shall be accompanied by the request in writing of either or both of the parties. Under this provision there have been up to the present time a considerable number of samples received at this office, and the opinions returned by us have been the means of settling a corresponding number of disputes and grievances. While it would be somewhat premature to predict that this condition is likely to continue, the measure, thus far, in its practical effect, seems to have proved a panacea for many ills, real or fancied, which formerly existed. The records of this office show that 1,008 out of a total number of 1,050 country elevators and warehouses, located on railroad right-of-way, have complied with the provisions of law by taking out licenses.

In concluding, the inspector says that inspectors and weighers are at St. Paul, Minneapolis, Duluth and Superior. Including railroads, mills and elevators, they are at ninety-four points.

### RICE ELEVATORS IN THE SOUTH.

A revolution has been inaugurated in the method of dealing with one of the most important productions of the South. The rice crop in that section stands second in importance only to the cotton crop. Its condition is always taken into consideration in any estimate made of the financial and industrial situation there. Up to the present time, however, the methods of handling this most important source of income have been of the most primitive character. They have been about on a par with those in use here away back in the thirties, when the wheat and corn crops of these Western states were taken to market in prairie schooners. Nobody could tell when to expect a lot of rice to be dumped on the market or how long a threatened rice famine might continue. The consequence of this was that the market price was uncertain and unreliable. The arrival of a few more wagon loads than were expected might depress the price considerably and be the source of much inconvenience in providing sufficient storage to receive it.

Hereafter the South is to handle its rice crop as the West now does its wheat crop. The National Rice Milling Company of New Orleans has introduced a system of rice elevators which are a thing of amazement to the natives down there. Through their introduction the whole system of preparing the crop for market and storing it until it goes into actual consumption will be changed, and the change is expected to bring about a great saving in the cost of handling the crop. In connection with these elevators machinery has been introduced for taking the grain in its crude state as it comes from the rice fields and preparing it for market. Each elevator that has been erected is furnished with improved machines known as separators, in passing through which the sound grain is separated from all foreign substances such as grass, straw, weeds and blasted and broken rice, and the sound grain is turned out ready for market or to be sent to the mill to be ground into rice flour.

Quite a number of these rice elevators have been established in different parts of the Southern section. They are supplied with all the latest improvements in machinery for scooping up carloads of the grain to be stored in them, or reloading the cars again for shipment to the marts for consumption. It is expected that their introduction will give a great impetus to the rice industry in the South and will prove to be a means of vastly improving the financial condition of that section.—*Chicago Post*.

### IMPORT AMERICAN CORN.

According to the last monthly report of the Bureau of Statistics, corn aggregating 3,765,929 bushels was exported during October, against 4,582,965 bushels exported in October, 1892; and during the ten months ending with October, 46,122,655 bushels were exported, compared with 69,857,254 bushels exported during the corresponding months of 1892. To the United Kingdom we exported 1,817,172 bushels, against 1,574,706 bushels in 1892; and during the ten months ending with October the exports amounted to 15,539,222 bushels, against 29,759,391 bushels exported during the same months of 1892. To Germany we exported 410,311 bushels in October, against 663,617 bushels exported in October, 1892; and during the ten months ending with October the exports amounted to 6,364,948 bushels, compared with 13,766,379 bushels for the corresponding months of 1892. No corn was exported to France in October and none in October, 1892; and during the ten months ending with October 1,545,061 bushels were exported, compared with 2,001,644 bushels exported during the corresponding months of 1892. Other countries in Europe received from us 423,497 bushels during October, against 629,113 bushels received in October, 1892; and during the ten months ending with October they received from us 6,920,275 bushels, compared with 15,253,681 bushels in the corresponding months of 1892.

We exported to Mexico 8,539 bushels during October, against 1,119,787 bushels in October preceding; and during the ten months ending with October we exported 2,412,202 bushels, against 4,063,061 bushels exported during the corresponding months preceding. We exported to Central America and British Honduras 3,002 bushels in October, against 6,537 bushels in October preceding; and during the ten months ending with October the exports were 146,957 bushels, compared with 105,718 bushels for the corresponding months preceding.

We exported to the British North American Possessions 1,003,380 bushels in October, against 390,259 bushels in October, 1892; and during the ten months ending with October we exported 11,438,680 bushels, compared with 3,419,927 bushels exported during the corresponding months of 1892. To Cuba we exported 62,360 bushels in October, against 87,038 bushels in October, 1892; and during the ten months ending with October we exported 858,287 bushels, compared with 809,389 bushels exported during the same months of 1892. We exported to Puerto Rico 745 bushels in October, against 200 bushels exported in 1892; and during the ten months ending with October the exports amounted to 17,589 bushels, compared with 43,217 bushels exported during the same months of 1892. There was no corn exported to Santo Domingo in October, compared with 570 bushels exported in October, 1892; and during the ten months ending with October 947 bushels were exported, against 5,188 bushels during the corresponding months of 1892. The other West Indies and Bermuda received from us 33,055 bushels in October, against 43,254 bushels in October preceding; and during the ten months ending with October they took from us 474,442 bushels, compared with 441,107 bushels for the corresponding months preceding.

We exported to South America 2,940 bushels in October, against 67,308 bushels in October, 1892; and during the ten months ending with October the exports amounted to 383,954 bushels, compared with 169,375 bushels for the corresponding months preceding. To other countries we exported 928 bushels in October, against 576 bushels in October preceding; and during the ten months ending with October the exports amounted to 20,091 bushels, compared with 19,177 bushels exported during the corresponding months of the year preceding.

A large amount of new ground has been broken this season for the first time in the vicinity of Bakersfield, Cal., and sown in Egyptian corn. A good deal of it in the Poso country and southward therefrom has already been threshed out. The product averages about fifteen sacks of 130 pounds each to the acre. A large amount of new land under the Lerdo Canal was planted this year to this crop. It is understood that most of this will be fed on the ground, first to cattle and afterward to hogs.



## EXHIBIT OF GRAIN CLEANING MACHINES AT ST. PETERSBURG.

An International Exhibition of machines, appliances and apparatus for the cleaning, screening, dressing and drying of grain and other seed will be held at St. Petersburg from March 2 to 16, 1894. The exhibition is organized by the Imperial Free Economic Society of Russia in St. Petersburg for the purpose of acquainting farmers, agricultural implement makers and agents, merchants, etc., with the best and newest machines, appliances, etc., for cleaning, screening, dressing and drying grain and other seed. The exhibition will include the following groups and classes:

GROUP 1.—Machines, etc., for the cleaning, screening and dressing of different cereals: Class 1. Apparatus for cleaning dust, chaff and other light substances from grain, and machines for classifying grain according to weight (blowers, dressing machines with special attachments for classifying grain, combined winnowers, etc.). Class 2. Centrifugal machines for classifying grain according to weight, and for cleaning grain of all heavy substances. Class 3. Machinery for separating grain from all heavy and large substances, such as half corns, round seeds, stones, dirt, tares, etc.; also for separating ergot from rye, sorting vetches and peas from oats, cockles from wheat, barley and oats, etc. (sifters, corn screens, cockle separators, etc.). Class 4. Appliances for separating one grain from another, i. e., rye from wheat, oats from barley, barley from wheat and from oats, and for sorting grain according to size (screens and graders).

GROUP 2.—Appliances for the removal of all foreign matter that cannot be separated by the above mentioned apparatus, and for the final dressing of grain and other seeds for market. Class 5. Machines for polishing and scouring grain, for destroying mildew, and for the removal of earthy matter (polishers, scourers, hummelers and havelers). Class 6. Machines for clipping grain (clippers).

GROUP 3.—Special machines, etc. for the cleaning of seeds of following plants: Class 7. Peas, lentils, vetches, beans, hemp, etc. Class 8. Turnips, mustard, flax, millet, sesamum, etc. Class 9. Mangels, beet and saintfoin. Class 10. Red, Swedish (alsike) and white clover, trefoil, alfalfa, etc. Class 11. Orchard, rye, blue, meadow and timothy grass, etc. Class 12. Garden vegetables such as carrots, fennel, parsley, etc.

GROUP 4.—Machines for separating cotton from its seed (gins).

GROUP 5.—Appliances, etc., for cleaning and sorting grain in connection with elevators and grain stores.

GROUP 6.—Apparatus, etc., for determining: (a) the absolute weight of seeds, and weight according to bulk; (b) various admixtures; (c) quality of grain from a technical point of view; (d) vitality and economical properties of seeds. Full collections of appliances necessary for the proper working and management of seed stations.

GROUP 7.—Automatic scales and weighers for granaries, elevators and grain stores; also indicators, etc.

GROUP 8.—Machines, etc., for drying grain. Class 13. Portable hot air driers. Class 14. Permanent hot air driers. Class 15. Portable steam driers. Class 16. Permanent steam driers. Class 17. Storehouses for drying grain by natural draught.

GROUP 9.—Wire network, sieves, etc., for sorting machines and driers.

GROUP 10.—Models, plans, sketches, drawings, various illustrations, pamphlets, books, etc., having reference to groups mentioned above.

### RULES AND REGULATIONS.

1. The exhibition will be open to all Russian and foreign makers of machines, etc.
2. Persons proposing to exhibit must give notice of their intention to the executive committee. Address, Imperial Free Economic Society, St. Petersburg, 4 Rota, Ismailovsky Polk, No. 1.
3. Special forms will be supplied to intending exhibitors on application to the AMERICAN ELEVATOR AND GRAIN TRADE.
4. The charge for space will be at the rate of 3 roubles per sq. arshin (5.3 square feet).
5. In making application it is necessary to state the amount of space required. On reasonable grounds the amount of space applied for may be subsequently altered by the committee.
6. All exhibits must be delivered at the place of exhibition twenty days before the opening.
7. Exhibitors requiring a motor must give special notice to that effect, and state the amount of horse power necessary.
8. Power necessary for the working of machines exhibited will be provided gratuitously.

9. All expenses in connection with the transit and adjustment of exhibits must be borne by the exhibitors themselves.

10. The executive committee shall not be held responsible for any damage resulting to machines or other exhibits during the exhibition.

11. The executive committee will refuse to accept machines, etc., other than those pertaining to the groups and classes, as specified above.

12. Exhibitors or their representatives shall be required to present copies of their catalogues and price lists to the executive committee.

13. Exhibitors or their representatives shall be obliged to be present at all hours while the exhibition is open to the public.

14. The term of six days will be given to exhibitors after the closing of the exhibition for packing and removing their machines, etc. Any effects left in the premises after the expiration of this term will be considered as being left at the disposal of the executive committee.

15. Trials of machines, etc., accompanied by demonstrations and explanatory readings, shall be conducted from 1 to 3 p. m., daily, if necessary.

16. Public lectures at certain hours will be held by persons invited for that purpose by the executive committee.

17. Any exhibit can be submitted to trial. Exhibits belonging to groups 1, 2, 3, 6 or 7 only shall be examined for award.

18. The best exhibits shall be awarded the following prizes: Honorary diploma (first prize), gold, silver and bronze medals, and honorable mention.

19. For the purpose of examining for award a jury will be elected from among the members of the Imperial Free Economic Society. The jury will elect a chairman and a secretary out of their midst.

20. A united assembly of the jury and the members of the executive committee will sanction the final allotment of prizes.

21. Only those machines, etc., will be examined for award that are intended for competition by the exhibitors, as notified by themselves previously to the executive committee.

22. If no authorized person is present to take charge of exhibits they may or may not be examined for award by the jury, as the latter may think fit.

23. Either the exhibitor or his representative must be present during the examination. Their inattendance, when previously informed, will be considered by the jury as a refusal to assist at the examination.

24. In examining any machine, apparatus or appliance for award it will be necessary to take into account its expediency and productiveness, the quality of labor performed, durability combined with simplicity of construction, facility in working it, excellence of material and price.

25. Exhibits received after the opening of the exhibition shall not be submitted to trial.

26. Exhibits showing considerable defects at commencement of trial shall not be further examined.

27. Complaints of exhibitors or their representatives at any irregular granting of prizes shall not be entered into.

28. The executive committee shall provide everything necessary for conducting the trial of exhibits, as seeds, tarpaulins, utensils, etc., at the expense of the exhibition fund.

29. Exhibitors wishing either to test their machines, etc., previously to their being examined by the jury, or to work them before visitors, will be obliged to provide themselves with seeds or grain, necessary appliances and personnel at their own expense.

## THE FUTURE OF WHEAT.

Mr. F. H. Peavey, the well-known grain dealer of Minneapolis, in an interview at Sioux City recently, admitted that he fully realized that grain prices are now very low, but as to the future he frankly declared that he had no opinion, and didn't believe it would be worth anything if he had one.

"If you want to make some money in grain," he said, "I'll give you a pointer. It is the best advice I can give on the subject, and I never charge for it. To do the best in grain—let it alone. Operations on the grain market are like those on the stock market in the play of 'Henrietta,' if you ever heard it. There is an old man in the piece who speculates in stocks. He is very smart and has been eminently successful. He has two sons. One is brilliant and successful, but gets on the opposite side of the market from his father, who is a bull. The other is a sort of imbecile, who knows nothing of the market and never asks advice. He tosses a copper; if it comes heads up he buys, if it's tails he sells. The imbecile gets wealthy while the father and the bright son fail.

"Yes, the prices of grain are very low, but I can see no reason to expect an advance. Take wheat. The elevators at Minneapolis, Duluth, Chicago and New York are full. There is no demand. The trouble is not because of lack of money. There never was a time when money was to be had more readily or cheaply, for investment in grain, than now. I can get all the money I want at 5 per cent. People are willing to put money into grain because it is a commodity that can be turned into money readily, and on which there is not much risk. They would be very slow to put the same money into farms to be cut up into town lots.

"The low prices of grain are caused by the small foreign demand. It is Liverpool, after all is said, that rules the world's prices on grain. As careful reports are received there every day from Russia and India, and South America and the United States, as we at

Minneapolis get from Minnesota and the Dakotas. The fact is, the world's production of wheat has increased faster than the demand for it, and I believe the prices will be lower and will stay so. Why not? Everything the farmer needs is to be had for less money than formerly. He farms for less money because he has better machinery, for which he pays less than he used to pay for poorer utensils. Everything else that he buys is cheaper in the same way.

"Over in Russia wheat is sold for next May's delivery at the same prices that are placed on that of today's delivery. We are paying 7 cents more for May wheat than for the cash article. The result is that the 7 cents is absorbed by the Russian, who is selling the wheat for May delivery, while we can't sell what we have on hand.

"The new countries always raise wheat, and the thing our Western farmers must do now is to diversify their crops. This is being done in a large degree already. Why, I can remember when 800,000 bushels of wheat were shipped out of Yankton county, S. D., in one year. Now little or no wheat goes from there; it's all corn and hogs. At that time corn was shipped to LeMars, because it was believed that corn could not be raised so far North. Now very little wheat is raised in that section; corn is the staple. Out on the Omaha road, in Nebraska, they raise corn, wheat, oats, flax and all the crops that can be made successful in this section, and the farmers are getting rich. When the cross roads went into the section that had formerly been entered only by the Omaha lines, I expected to lose a great deal of business; instead, it has increased very much. The country is filling up. More land is farmed, and it is farmed better.

"I consider that this country is still in the infancy of its development. Your children will say, in their time, that it is still a new country. Only one-eleventh of North Dakota is under the plow, and one-seventh of Minnesota. The proportion in Iowa is still very small. All this must be filled up before this will cease to be a new country."

## WHEAT RECEIPTS AT PRIMARY MARKETS.

The wheat receipts at nine primary markets during the 23 weeks ending December 2, for the three last years, as follows:

	1893.	1892.	1891.
St. Louis.....	10,115,000	20,974,000	19,398,000
Toledo.....	9,511,000	19,506,000	17,167,000
Detroit.....	5,827,000	5,391,000	5,374,000
Kansas City.....	8,647,000	18,024,000	9,197,000
Cincinnati.....	607,000	1,296,000	1,570,000
• Winter wheat.....	34,707,000	65,191,000	52,806,000
Chicago.....	14,292,000	38,754,000	35,147,000
Milwaukee.....	6,445,000	8,499,000	5,852,000
Minneapolis.....	27,856,000	35,023,000	31,276,000
Duluth.....	23,624,000	25,595,000	30,552,000
Spring wheat.....	72,217,000	107,871,000	102,827,000
Winter wheat.....	34,707,000	65,191,000	52,806,000
Total, 23 weeks.....	106,924,000	173,062,000	155,633,000

## EXPORTS FROM ATLANTIC PORTS.

The exports of breadstuffs, as compiled by George F. Stone, secretary of the Chicago Board of Trade, from the Atlantic ports during the two weeks ending December 9, as compared with same weeks last year, have been as follows:

	For the week ending Dec. 9. Dec. 10.		For the week ending Dec. 2. Dec. 3.	
	1893.	1892.	1893.	1892.
Wheat, bu.....	712,000	2,001,000	691,000	1,846,000
Corn.....	1,218,000	751,000	710,000	781,000
Oats.....	20,000	30,000	10,000	247,000
Rye.....	.....	29,000	.....	33,000
Flour, bbls.....	281,000	326,000	230,000	393,000

When out at Polk Butler's place on Deschutes Ridge a Dallas man asked Mr. Butler when school would commence at the Butler School House. "I don't know. Not till the wheat gets dry." "Why, what's the school got to do with wheat?" "We are drying it in the school house." And sure enough, wet wheat was scattered all over the school house floor from three to five feet deep.—*Review, Spokane, Wash.*



# LATE PATENTS

Issued on November 7, 1893.

DRIVE CHAIN.—John L. Taplin, Circleville, assignor to Joseph A. Jeffrey, Columbus, O. (No model.) No. 508,258. Serial No. 383,414. Filed March 2, 1891.

GRAIN ELEVATOR.—Daniel Wilde, Washington, Ia. (No model.) No. 508,070. Serial No. 467,461. Filed March 24, 1893.

PETROLEUM ENGINE.—Oscar Brunler, Eutritsch, Leipsic, Germany. (No model.) No. 507,987. Serial No. 432,528. Filed May 10, 1892.

PROCESS OF AND APPARATUS FOR POPPING OR BURSTING BARLEY, ETC.—James White, London, Eng. (No model.) No. 508,125. Serial No. 487,042. Filed Oct. 2, 1893.

Issued on November 14, 1893.

BALING PRESS.—Benjamin F. Hackett and James P. McLarty, Hackett City, Ark. (No model.) No. 508,703. Serial No. 460,881. Filed Feb. 3, 1893.

DUST SEPARATING MACHINE.—William W. Green, Chicago, Ill. (No model.) No. 508,611. Serial No. 367,915. Filed Oct. 13, 1890.

GAS ENGINE.—Wilhelm von Oechelhaeuser and Hugo Junkers, Dessau, Germany. (No model.) No. 508,833. Serial No. 451,102. Filed Nov. 5, 1892.

GRAIN CONVEYOR.—John Vogt, Winesburg, O. (No model.) No. 508,788. Serial No. 482,227. Filed Aug. 3, 1893.

HAY PRESS.—John T. Russell, Carthage, Mo. (No model.) No. 508,843. Serial No. 462,132. Filed Feb. 13, 1893.

SEPARATOR.—Fairfax H. Whelan, Santa Barbara, and Robert W. Jessup, Los Angeles, Cal. (No model.) No. 508,792. Serial No. 461,791. Filed Feb. 10, 1893.

GRAIN STORAGE WAREHOUSE.—Daniel R. Bowker, Brooklyn, N. Y. (No model.) No. 508,561. Serial No. 446,684. Filed Sept. 23, 1892.

Issued on November 21, 1893.

BALING PRESS.—Peder Nelson, St. Paul, Minn., assignor of two-thirds to Patrick J. Kough, same place. (No model.) No. 508,966. Serial No. 452,996. Filed Nov. 25, 1892.

CONVEYOR.—David J. Sheldrick, Columbus, O., assignor to Joseph A. Jeffrey, same place. (No model.) No. 509,251. Serial No. 467,135. Filed March 22, 1893.

GAS ENGINE.—Clark Sintz, Springfield, O. (No model.) No. 509,255. Serial No. 450,095. Filed Oct. 27, 1892.

HUSKING MACHINE FOR RICE, ETC.—Josef Winter, Aschersleben, Germany. (No model.) No. 509,011. Serial No. 325,374. Filed Sept. 28, 1889.

Issued on November 28, 1893.

MACHINE FOR AND MODE OF HULLING RICE, ETC.—Leon A. Ricster, Buffalo, N. Y. (No model.) No. 509,606. Serial No. 462,829. Filed Feb. 18, 1893.

FEED MILL CUT-OFF.—James F. Winchell, Springfield, O., assignor to the Foos Manufacturing Company, same place. (No model.) No. 509,416. Serial No. 460,704. Filed Feb. 2, 1893.

SCALE BEAM.—Samuel T. Braley, Rutland, Vt., assignor to the Howe Scale Company of 1886, same place. (No model.) No. 509,591. Serial No. 478,867. Filed June 26, 1892.

Issued on December 5, 1893.

GRAIN CAR DOOR.—George W. Perry, Peoria, Ill. (No model.) No. 509,941. Serial No. 460,059. Filed Jan. 28, 1893.

GAS ENGINE.—George E. Hoyt, San Francisco, Cal. (No model.) No. 510,140. Serial No. 466,513. Filed March 17, 1893.

## TRADEMARKS.

CLOVER SEED.—Vilmar & Goetze, New York, N. Y. No. 23,843. Application filed Oct. 25, 1893. Used since Sept. 8, 1893. The representation of a four-leaf clover.

The farmers in North Idaho, having given up the idea of selling their wheat, are now feeding it to hogs, cattle and horses. The wet season caught a great deal of wheat in the field which is now damaged. Those who have no stock to feed their wheat to must see their crop go to waste. Those whose harvest was finished are not in much better shape from the fact that the price offered does not pay for hauling to market.

## RECEIPTS AND SHIPMENTS AT KANSAS CITY.

The receipts and shipments of grain and hay at Kansas City, Mo., during the 4 weeks ending December 2, as compared with the same period of the preceding year, were, according to W. D. Charde, secretary of the Commercial Exchange, as follows:

Articles.	Receipts.		Shipments.	
	1893.	1892.	1893.	1892.
Wheat, bushels ..	1,225,200	2,033,400		
Corn, bushels.....	1,207,350	414,700		
Oats, bushels ....	286,000	180,000		
Rye, bushels.....	17,400	612,000		
Flaxseed, bushels	12,000	6,000		
Hay, tons.....	6,090	5,190		
Bran, ears.....	6	17		

## RECEIPTS AND SHIPMENTS AT MINNEAPOLIS.

The receipts and shipments of grain and hay at Minneapolis, Minn., during the 4 weeks ending December 2, as compared with the same period of the preceding year, were, according to G. D. Rogers, secretary of the Minneapolis Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1893.	1892.	1893.	1892.
Wheat, bushels.....	5,919,240	7,069,020	668,150	970,080
Corn, bushels.....	353,220	118,850	16,120	9,640
Oats, bushels.....	308,170	403,620	124,840	175,930
Barley, bushels.....	192,260	325,100	210,130	209,060
Rye, bushels.....	22,860	15,230	16,210	17,950
Flaxseed, bushels.....	130,220	166,240	121,210	103,940
Hay, tons.....	3,099	4,381	179	145
Flour, barrels.....	35,092	24,631	839,475	751,254

## RECEIPTS AND SHIPMENTS AT MILWAUKEE.

The receipts and shipments of grain and hay at Milwaukee, Wis., during the 4 weeks ending December 2, as compared with the same period of the preceding year, were, according to Wm. J. Langson, secretary of the Milwaukee Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1893.	1892.	1893.	1892.
Wheat, bushels.....	1,231,800	1,329,450	145,600	386,408
Corn, bushels.....	263,900	62,640	91,650	35,772
Oats, bushels.....	674,000	712,000	423,155	592,972
Barley, bushels.....	2,199,260	1,770,700	1,743,949	1,585,221
Rye, bushels.....	97,200	133,080	83,900	186,402
Grass seed, pounds...	1,838,274	184,800	1,032,116	148,909
Flaxseed, bushels.....	59,698	46,020	20,354	50,760
Hay, tons.....	1,065	1,070	119	
Flour, barrels.....	332,039	210,894	286,883	419,386

## FLAXSEED AT CHICAGO.

The monthly receipts and shipments of flaxseed at Chicago during the past 23 months, as reported by S. H. Stevens, flaxseed inspector of the Board of Trade, were as follows:

Months.	Receipts.		Shipments.	
	1893.	1892.	1893.	1892.
January.....	396,550	782,650	323,261	296,355
February.....	187,550	556,050	232,555	200,884
March.....	367,950	592,900	333,257	223,395
April.....	232,650	547,800	660,506	702,589
May.....	190,300	309,650	401,359	743,930
June.....	86,900	563,750	448,742	577,002
July.....	140,800	612,700	250,091	806,375
August.....	414,700	729,300	341,696	1,009,113
September.....	1,881,550	761,750	1,195,733	974,668
October.....	2,340,800	1,452,000	1,810,110	1,150,685
November.....	1,178,659	1,395,350	887,708	1,365,880
December.....		743,050		228,060
Total.....	7,418,400	9,046,950	6,884,928	8,278,936

## RECEIPTS AND SHIPMENTS AT CHICAGO.

The following table, compiled by George F. Stone, secretary of the Board of Trade, shows the receipts and shipments at Chicago during November, 1893 and 1892, of seeds, hay and broom corn:

Repts.	Timothy lbs.	Clover lbs.	Other grass seeds, lbs.	Flax-seed, bu.	Broom corn, lbs.	Hay, tons.
1893 ..	4,930,930	2,352,303	977,769	1,477,273	6,029,430	31,306
1892 ..	2,263,300	1,173,427	614,443	1,605,098	7,580,035	20,787
Shipments.						
1893 ..	2,758,738	2,858,468	266,955	993,749	1,751,025	5,969
1892 ..	1,816,452	931,447	1,686,738	1,315,180	3,446,289	3,223

## RECEIPTS AND SHIPMENTS AT TOLEDO.

The receipts and shipments of grain and hay at Toledo, O., during the 4 weeks ending December 2, as compared with the same period of the preceding year, were, according to Denison B. Smith, secretary of the Produce Exchange, as follows:

Articles.	Receipts.		Shipments.	
	1893.	1892.	1893.	1892.
Wheat, bushels.....	1,058,200	876,200	324,500	816,000
Corn, bushels.....	629,600	188,900	584,300	196,200
Oats, bushels.....	21,500	12,400	18,300	6,000
Barley, bushels.....		9,100		4,000
Rye, bushels.....	23,000	34,600	30,400	40,600
Flour, barrels.....	10,087	6,167	112,630	108,797

## RECEIPTS AND SHIPMENTS AT DETROIT.

The receipts and shipments of grain and hay at Detroit, Mich., during the 4 weeks ending December 2, as compared with the same period of the preceding year, were, according to Geo. M. Lane, secretary of the Detroit Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1893.	1892.	1893.	1892.
Wheat, bushels.....	683,742	594,058	375,345	334,875
Corn, bushels.....	112,127	146,625	37,638	56,815
Oats, bushels.....	153,261	145,312	21,611	7,424
Barley, bushels.....	64,562	184,113	24,906	41,559
Rye, bushels.....	6,458	19,571	7,582	18,894
Flour, barrels.....	14,649	17,128	9,024	14,151

## RECEIPTS AND SHIPMENTS AT ST. LOUIS.

The receipts and shipments of grain and hay at St. Louis, Mo., during the month of November, as compared with the same period of the preceding year, were, according to Geo. H. Morgan, secretary of the St. Louis Merchants' Exchange, as follows:

Articles.	Receipts.		Shipments.	
	1893.	1892.	1893.	1892.
Wheat, bushels.....	1,051,782	1,964,118	770,717	1,293,457
Corn, bushels.....	1,830,052	1,206,680	1,408,964	509,054
Oats, bushels.....	620,568	678,762	356,531	464,071
Barley, bushels.....	510,222	497,000	10,266	27,393
Rye, bushels.....	43,576	208,616	48,742	150,678
Hay, tons.....	12,980	9,500	3,788	2,365
Flour, barrels.....	82,462	121,550	182,709	209,200
Bran, ears.....	64	65	166	52
Bran, sacks.....	31,935	15,341	73,765	45,364

## RECEIPTS AND SHIPMENTS AT PEORIA.

The receipts and shipments of grain and hay at Peoria, Ill., during the 4 weeks ending December 2, as compared with the same period of the preceding year, were, according to R. C. Grier, secretary of the Peoria Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1893.	1892.	1893.	1892.
Wheat, bushels.....	43,800	61,450	27,400	38,780
Corn, bushels.....	1,491,500	732,900	392,700	92,350
Oats, bushels.....	1,049,500	1,120,200	987,250	968,700
Barley, bushels.....	271,600	180,750	240,800	135,600
Rye, bushels.....	9,000	30,600	3,000	5,400
Mill Feed, tons.....	240	72	3,017	1,330
Hay, tons.....	6,022	4,460	1,090	1,430
Flour, barrels.....	15,900	12,750	15,300	12,030
Spirits & Liquors, bbls.	2,380	265	22,332	29,074
Syrup & Glucose, bbls.	800		34,956	9,750

## RECEIPTS AND SHIPMENTS AT BUFFALO.

The receipts and shipments of grain and hay at Buffalo, N. Y., during the month of November, as compared with the same period of the preceding year, were, according to Wm. Thurstone, secretary of the Buffalo Merchants' Exchange, as follows:

Articles.	Receipts by Lake.		Shipments by Canal.	
	1893.	1892.	1893.	1892.
Wheat, bushels....	5,704,900	8,928,025	3,541,515	2,547,488
Corn, bushels....	5,284,725	4,725,254	1,467,247	1,382,055
Oats, bushels....	1,603,730	883,644	249,222	519,976
Barley, bushels....	2,825,088	2,226,625	952,137	896,914
Rye, bushels....	57,000	225,548	16,955	16,000
Seed, bags.....	11,968	24,994		
Flaxseed, bushels.	1,010,514	919,600	*37,136,240	*33,068,382
Flour, barrels....	1,686,650	1,519,315	735	1,461

\*Quoted in pounds.



## RANGE OF PRICES AT CHICAGO.

The daily range of prices for cash grain at Chicago since November 15 has been as follows:

November.	NO. 2 RED W. WHEAT.		NO. 2 SPRING WHEAT.		NO. 2 CORN.		NO. 2 OATS.		RYE.		BARLEY.		FLAX SEED.	
	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.
15	61 1/2	61 3/4	60	60 1/2	37	37 1/2	28	28 1/2	46	46			105	105 1/2
16	61 1/2	61 3/4	60	60 1/2	37	37 1/2	28	28 1/2	46	46			106	106 1/2
17	60 1/2	60 3/4	59 1/2	60 1/2	36 1/2	36 3/4	27 1/2	28 1/2	45	46			107	107 1/2
18	60	60	59	60	35 1/2	35 3/4	27 1/2	28 1/2	44 1/2	45 1/2			108	108 1/2
19														
20	60	60 1/2	60 1/2	61	35 1/2	35 3/4	27 1/2	28 1/2	44	45			106 1/2	107
21	61	61 1/2	60 1/2	61 1/2	36 1/2	36 3/4	28 1/2	29 1/2	45	46			107	107 1/2
22	60	61 1/2	60 1/2	61 1/2	35 1/2	35 3/4	28	28 1/2	45	46			107	108 1/2
23	61 1/2	62	60 1/2	61 1/2	35 1/2	35 3/4	28	28 1/2	46	46			109	110
24	61	61 1/2	60 1/2	61 1/2	35	35 1/2	28	28 1/2	46	47			113	114 1/2
25	62 1/2	62 1/2	61 1/2	62 1/2	35 1/2	35 3/4	28	28 1/2					112 1/2	114 1/2
26														
27	62 1/2	62 1/2	62 1/2	63	35 1/2	35 3/4	28	28 1/2	49	50			113	115
28	62 1/2	62 1/2	61 1/2	62	35	35 1/2	28	28 1/2	50	50			114 1/2	115
29	62 1/2	62 1/2	61 1/2	62 1/2	35	35 1/2	28 1/2	28 1/2	51	51			116	116 1/2
30														
1	63	63 1/2	62 1/2	63	35	35 1/2	28 1/2	28 1/2	47	48			116 1/2	116 1/2
2	62 1/2	63	62	62 1/2	35	35 1/2	28 1/2	28 1/2	46 1/2	46 1/2			117	118
3													122	123
4	63 1/2	64 1/2	63	64 1/2	35 1/2	35 3/4	28 1/2	28 1/2	46 1/2	47			122	123
5	62 1/2	63	62 1/2	63 1/2	35 1/2	35 3/4	28 1/2	28 1/2	46 1/2	46 1/2			123	124
6	63 1/2	63 1/2	63 1/2	63 1/2	35 1/2	35 3/4	29	29	46	46			123	124
7	63 1/2	64 1/2	63 1/2	64 1/2	36 1/2	36 3/4	29	29	46	46 1/2			122	123
8	62 1/2	62 1/2	62 1/2	63	35 1/2	35 3/4	28 1/2	28 1/2	46 1/2	46 1/2			121	121
9	63	63 1/2	62 1/2	63	35 1/2	35 3/4	28 1/2	28 1/2					122 1/2	122 1/2
10														
11	63 1/2	63 1/2	62 1/2	63 1/2	35 1/2	35 3/4	28 1/2	28 1/2	46	46			122 1/2	123
12	62	62	61 1/2	62 1/2	35 1/2	35 3/4	28 1/2	28 1/2					127	127 1/2
13	61 1/2	62 1/2	61 1/2	62	35 1/2	35 3/4	28 1/2	28 1/2	46	48			128	129
14	61 1/2	61 1/2	61	62	35 1/2	35 3/4	28 1/2	28 1/2	47 1/2	48			128	129 1/2
15														

\* Thanksgiving Day.

For week ending November 18, prime contract timothy sold at \$3.18@4.62 per cental; prime contract clover at \$8.90@13.00; Hungarian at \$0.63@1.15; German millet at \$0.60@1.10; buckwheat at \$1.10@1.60 per 100 pounds. No. 1 flax on track sold at \$1.03 1/2@1.09 1/2. The receipts of hay for the week were 6,196 tons, against 6,921 tons for the previous week. Shipments for the week were 1,117 tons, against 1,619 tons for the previous week. The market for timothy hay ruled dull, scarcely any inquiry for shipment and local dealers were about the only buyers. Sales of No. 1 timothy ranged at \$10.00@11.00; No. 2, \$9.00@10.00; mixed, \$9.00; not graded, \$8.25@10.00; threshed \$7.00; Illinois upland prairie, \$5.50@7.00; Indiana, \$5.50@6.75; Wisconsin, \$7.50; Iowa, \$7.00@8.75 for fair to fancy; No. 1 prairie, \$6.00; packing hay, \$5.25. Oat straw sold at \$5.00, and rye straw at \$7.00@7.50.

For week ending November 25 prime contract timothy sold at \$3.15@4.40 per cental; prime contract clover at \$9.00@12.92 1/2; Hungarian at \$0.62 1/2@1.15; German millet at \$0.60@1.10; buckwheat at \$1.25@1.60 per 100 pounds. No. 1 flax on track sold at \$1.06 1/2@1.14 1/2. The receipts of hay for the week were 8,552 tons, against 6,196 tons for the previous week. Shipments for the week were 1,318 tons, against 1,117 tons for the previous week. During the early part of the week the offerings of both timothy and prairie hay were quite large and the demand was only fair. Later the receipts became smaller and although the demand did not improve much a firmer feeling existed. Sales of No. 1 timothy ranged at \$10.00@11.00; No. 2, \$9.00; mixed, \$7.00@8.50; not graded, \$9.50@10.00; Illinois upland prairie, \$6.00@7.50; Indiana, \$6.25@6.50; Kansas, \$8.50; Iowa, \$7.00@8.00 for fair to good, and \$8.25@8.75 for choice to fancy; No. 1 prairie, \$6.00; packing hay, \$5.25; bedding hay, \$5.00. Wheat straw sold at \$5.75; oat straw at \$5.00@5.75; rye straw at \$6.50@7.50.

For week ending Dec. 2 prime contract timothy sold at \$3.30@4.36 per cental; prime contract clover at \$9.10@12.67 1/2; Hungarian at \$0.62 1/2@1.15; German millet at \$0.60@1.10; buckwheat at \$1.15@1.65 per 100 pounds. No. 1 flax on track sold at \$1.08@1.16 1/2. The receipts of hay for the week were 6,858 tons, against 8,552 tons for the previous week. Shipments for the week were 1,192 tons, against 1,318 tons for the previous week. Arrivals of both timothy and upland prairie were only moderate and market ruled dull. The inquiry was light from all sources and there was no demand to speak of on shipping account. Local dealers took hold sparingly. Sales of No. 1 timothy ranged at \$10.00@11.00; No. 2, \$8.00@9.50; mixed, \$8.00@8.75; not graded, \$9.00@10.00; Illinois upland, \$6.50@6.75; Indiana, \$6.00@6.50; Iowa, \$6.50@7.75 for fair to good, and \$8.00@8.75 for choice to fancy; No. 1 prairie, \$6.50. Wheat straw sold at \$5.25@5.75; oat straw at \$5.50, and rye straw at \$7.25@7.50.

For week ending Dec. 9 prime contract timothy sold at \$3.50@4.42 per cental; prime contract clover at \$9.65@12.32 1/2; Hungarian at \$0.62 1/2@1.15; German millet at \$0.70@1.10; buckwheat at \$1.00@1.75 per 100 pounds. No. 1 flax on track sold at \$1.08 1/2@1.24. The receipts of hay for the week were 5,727 tons, against 6,858 tons for the previous week. Shipments for the week were 1,416 tons, against 1,192 tons for the previous week. The demand for timothy was light and offerings fairly liberal, but prices held steady. Sales of

No. 1 timothy ranged at \$10.00@11.00; No. 2, \$9.50@9.75; mixed, \$8.00@8.50; not graded, \$10.00@10.50; Illinois prairie, \$6.50@7.25; Indiana, \$6.50@6.75; Iowa, \$7.00@8.50 for fair to choice, and \$8.75@9.00 for fancy; No. 1 prairie, \$6.00; bedding hay, \$5.50. Wheat straw sold at \$5.50; oat straw at \$5.50@6.00, and rye straw at \$7.00@8.00.

## INSPECTED RECEIPTS AT CHICAGO.

According to the report of Chief Grain Inspector George P. Bunker the grain received at Chicago during the month of November was graded as follows:

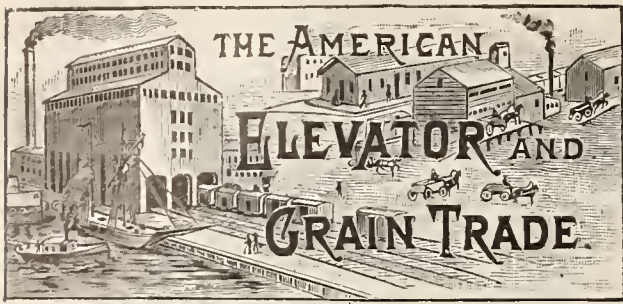
WINTER WHEAT.													
Railroad.	White.			Hard.			Red.			No Grade.			Total.
	2	3	4	1	2	3	1	2	3	4	1	2	
C., B. & Q.	1	1			38	66		12	54	36			2
C., R. I. & P.					10	14		10	23	13			1
C. & A.					6	2			56	60			2
Illinois Central	2				12	5		16	52	9			
Freeport Div.									1				
Galena Div. N. W.					5	20			2	3			
Wis. Div. N. W.					1			11	9				
Wabash	1				1			6	39	34			6
C. & E. I.								6	37	5			2
C., M. & St. P.													
Wis. Cent.	1				1				13	1			
C. Gr. Western	2	2			4	33		87	121	49			1
A., T. & S. Fe.	1	3			39	310		256	94	14			3
Through & Spec.	2					304		79	116	14			
Total each grade	2	8	6		116	756		483	617	238			17
Total W. wheat.													2,215

SPRING WHEAT.													
Railroads.	Northern.	2			No Grade.	White.			Mixed.			Total.	Wheat.
		2	3	4		2	3	4	2	3	4		
C., B. & Q.		23	122	11					8	1	1		
C., R. I. & P.		2	103	11					3				
C. & A.									1				
Illinois Central		1											
Freeport Div.			2	1									
Galena Div. N. W.		41	482	66		11							
Wis. Div. N. W.		6	78	1		1						5	
Wabash				1									
C. & E. I.													
C., M. & St. P.													
Wis. Cent.		108	908	24									
C. Gr. Western		4	37	4									
A., T. & S. Fe.													
Through & Special.		114	73	6									
Total each grade		299	1805	125		12			12	1	6		
Total sp. wheat													2,260

CORN.													
Railroad.	Yellow.		White.		2	3	4	No Grade.					
	2	3	2	3									
C., B. & Q.	491	118	25	7	766	413	47						
C., R. I. & P.	96	88	7	6	188	264	73						
C. & A.	152	186	46	41	241	352	30						3
Illinois Cent.	427	584	91	170	185	231	43						
Freeport Div.	96	31	10	8	93	59	17						
Gal. Div. N. W.	178	199	10	12	276	470	42						5
Wis. Div. N. W.	3	1			3	2							
Wabash	143	190	71	173	72	145	94						
C. & E. I.	42	46	28	54	20	112	27						1
C., M. & St. P.													
Wis. Cent.	132	64	15	7	747	221	44						
C. Gr. Western	27	31	7	2	106	93	25						
A., T. & S. Fe.	81	106	21	19	321	239	14						
Th'gh & Spel	34	74	3	5	32	21	5						2
Total each grd	1,902	1,718	334	484	3,059	2,622	461						11
Total corn													10,591

BARLEY.													
Railroad.	Bay Brewing.		Chevalier.		3	4	5	No Grade.					
	3	3	2	3									
C., B. & Q.				1	83	34	5	1					2,967
C., R. I. & P.					59	115	5	4					1,601
C. & A.					2								1,318
Illinois Central													2,192
Freeport Div.					140	32	4	2					978
Galena Div. N. W.					239	96	6	1					3





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HARLEY B. MITCHELL, - - - Editor.

### ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching this trade. Advertising rates made known upon application.

### CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., DECEMBER 15, 1893.

## SETTLING BOARD OF TRADE DEALS.

The committee of five members of the Chicago Board of Trade, appointed by the President to investigate Robert Lindblom's system of trading, have handed in an adverse report, in which the board of directors has concurred. This plan, which is explained on another page, possesses advantages which are of admitted importance. But the receivers and shippers were very generally opposed to the plan, claiming that it would much increase the bookkeeping and clerical help necessary to keep track of the substitution of contracts and the putting up and taking down of margins. The committee in its report broadly hinted that the adoption of the plan would put the Board in the same category as the bucket shops.

But the feature which, more than any other consideration, probably caused the rejection of the plan, was the form of contract proposed. The present rules of the Board were purposely made to facilitate transactions for immediate or future delivery; while the proposed system would substitute transactions in differences. Under the present contract either party can compel its literal fulfillment. "But under the proposed system," say the committee, "the form of the original contract will be so modified that it would be impossible for anyone to make a contract for the future delivery of property in the open markets of the Board and enforce the fulfillment of the terms of that particular contract by the original parties thereto. Either party, the buyer or the seller, could at any time be compelled to relinquish his rights to enforce actual delivery of property on any particular contract which he had made, and must, under the rules of the Board, amended as proposed, submit to the substitution of another contract with another party, at the same or a different price, and adjust the difference thereto. This strikes at the root of the business of the Board, and, in the minds of your committee, would destroy its legal standing, established at so great a

cost of time and money in the highest courts of the land."

Evidently the committee do not want the shadow of illegality on the Board's contracts. It would sacrifice convenience even, to keep these contracts strictly within the law. But there is no mistaking the fact that there is a demand for a change in the system of trading.

### SUBSCRIBERS' LAST CHANCE.

Our guessing contest, regarding which full particulars are published with the guessing ticket in the advertising columns of this number, is nearing the end. Subscribers have only 16 days more to fill in the guessing tickets. No guesses will be accepted after January 1. Grain dealers who are not subscribers should send in their subscriptions, not because they will then be entitled to guess, but because every dealer should try to keep posted on everything that occurs of importance to the grain trade. This information and much more we aim to supply for \$1 per year.

If you know how much wheat will be exported in the grain during January, and are a subscriber, you have an opportunity to get the price of this journal for fifty years free.

### A CHANCE FOR MANUFACTURERS OF CLEANING AND DRYING MACHINES.

We give on another page the rules and regulations and the classification of the International Exhibition of Machines, Appliances and Apparatus for Cleaning, Screening, Dressing and Drying of Grain, etc., which will be held at St. Petersburg, Russia, from March 14 to March 28, 1894. We need hardly tell our manufacturers of grain cleaning machinery that Russia is one of the most promising fields at the present time; a field where American machinery has only to be known to be appreciated. This exhibition is held for the purpose of bringing to the attention of the Russian public the best machinery. The article elsewhere will acquaint the reader with the scope of the exhibition. We trust that American machinery will be fully represented, as we believe that the avenue is open for a profitable business.

We have a few copies of the application and consignment forms, which we will send to manufacturers who want them. They are sent us by E. Mitscherlik of the committee, with the request to distribute them to interested parties.

### CARE IN LOADING CARS.

Carelessness in loading grain into cars has been always a source of loss and annoyance, and has kept open a wide and inviting way for dishonest receivers. It also makes the receivers' business an inviting one for persons that are dishonest and brings ignominy upon a reputable class of merchants.

Shippers should load grain in strong cars only, and make sure that each car is well coopered. This advice is not intended for you, but for the careless shipper at the next station. We know that you are very careful about loading, that no grain ever leaks out and that you never complain of short weight, but letter files and grain strewn tracks tell a different tale.

When you do nail a board over a crack or a hole in the bottom of the car, remember that it is not necessary to build a pyramid over it. Many cars arriving at central markets have their floors so covered with blocks that it is difficult to unload the grain. At some elevators the handlers of the power shovels are careless for personal reasons and when the floor is covered with blocks they have an extra excuse for leaving part of the grain in the car for their friends, the sweepers. Where the grain is transferred to another road by a grain transfer car the live

stock of the operators have a feast and sing loud praises for the man who covered the floor with blocks.

Grain shippers, as well as their employees have not given enough attention to this matter, and many times they have loaded heavily, cars that should have been in the scrap heap years ago. As long as they accept old, worn-out cars that are unfit for grain, from carriers, the traffic managers will continue to press them into service. Tolerate an abuse and it will be increased, protest persistently and vigorously and some effort will be made to remedy the trouble.

### DELAY IN GRAIN SHIPMENTS.

The complaints of poor service, scarcity of cars and delay of shipments at initial points and in transit have been less on the crop of 1893 than for several years, but still some districts are afflicted. Reports from Dakota, Iowa, Nebraska and Washington show that shippers in these states have had anything but good service. In fact, some very bitter complaints have been entered.

Carriers will never exert themselves to accommodate shippers that have to ship over their line, if they ship at all, until shippers take decisive action to compel them to do so. Carriers are granted certain rights and privileges by the state, and are expected to furnish ample shipping facilities and prompt service, and they are expected never to indulge in discrimination between persons or places. The shipper at a competing point always gets cars when he wants them, and is seldom inconvenienced, while the shippers at country points, with only one road, smoke and swear for cars until the road has no other use for them, then they can get them.

We have often pointed out that shippers can get damages for such delays, and that the measure of damages is the difference between the price at time grain should have been delivered and the price at the time it was delivered. The Supreme Court of California has recently given a decision in an action for delay in delivering eggs, that amounts to the same thing.

Delays at point of shipment and in transit do not occur as frequently as formerly, but they will not become less frequent unless shippers protest and take some action in the courts to protect their rights.

### DEMURRAGE ON COAL DECIDED LAWFUL.

The Car Service Association of Chicago has been striving for an age to get a decision from a Chicago judge to the effect that the demurrage charge is lawful, and finally they have succeeded in one case. The decision was rendered in the case of Thomas Purcell vs. the Pittsburg, Cincinnati, Chicago & St. Louis Railroad Company. The plaintiff asked for an injunction to restrain the carrier from holding a consignment of coal for demurrage.

At first the court was disposed rightly to dismiss the bill for want of equity, but finally ordered the attorneys to prepare a suitable order. The real point at issue was whether the railroad company had a lien upon the coal for car service charges which had accrued upon that particular freight by reason of unreasonable delay in receiving and unloading. The court held that the company had a lien; that having no storehouse for coal, and this freight not being such as could be warehoused, the company was entitled to payment for the use of the cars. Incidentally, however, the court held that a company could not hold freight in its possession for charges which had accrued upon freight already delivered or for other general indebtedness.

Judging from the wording of the decision, the court would not sustain a lien for demurrage on freight that could be placed in warehouse. When the courts have been induced to support



the enforcement of this extortion on grain shippers and receivers we trust their attention will be called to the delay of grain by carriers without remuneration to owner.

### THE CORN PROPAGANDA.

The missionary efforts being made abroad in behalf of our corn have not been relaxed, though less is now heard than a year ago, because the novelty has worn off. The Scandinavian countries are now the point of attack. They certainly present a good field for work. Their cereal food supply is short and invariably dear. They have no prejudice against American corn. There are no duties levied on imported breadstuffs, or else the duties are very low. Some progress has already been made. In Copenhagen American corn products can now be obtained in the stores. A syndicate of eleven Danish brewers are experimenting on the use of corn in beer-making. Corn is admirably suited as a bread grain for the people of these Northern countries; and with no initial prejudice to overcome, Scandinavia is a promising customer for the future.

### CROSSLINES MUST CONSTRUCT CONNECTING SWITCHES.

Recently an Illinois grain shipper complained to us that he found it necessary to operate two elevators in the same town in order to ship grain over either of the two railroads. The railroads had been petitioned to build a connecting switch but refused. Carriers should be required to put in connecting switches at points where they cross for their own advantage as well as the convenience of the shipping public.

In Nebraska an attempt is being made to remedy this evil, and the State Board of Transportation has begun inquiries into the necessity of enforcing the Packwood Switch Law, which was passed by the last legislature. The law calls for connecting switches to be built wherever there are two roads in one town. In the majority of towns in the Western country there are no connecting switches, and the result is that elevator men are put to the expense of transferring grain from one ear to another. The law is to provide that original cars may be brought up to the elevator and unloaded or loaded. The railroads have not yet complied with the law, the managers stating that the expense of building new switches by cutting the main would not warrant them, as the shipments would not pay for the switch.

### ANTI-OPTION LEGISLATION.

If Congress has any time to spare from the discussion of tariff and the currency, it is altogether likely that we shall have another siege of the anti-option question. Senator Pepper has already warmed over the Washburn Bill and introduced it in the Senate. Farmer Hatch has prepared another bill and submitted it to the Committee on Agriculture, of which he is chairman. He will introduce it in the House and try to have it referred to his committee. According to the present rules of the House, it should be referred to the Committee on Ways and Means. If this is done, Hatch's bill will die "a-bornin." If the Agricultural Committee gets the reference it will report the bill favorably and the fun will begin.

Uncle Hatch has cut out of the bill the part imposing a tax on legitimate deals. He thinks his bill will discriminate between legitimate and illegitimate deals effectually. If his bill makes distinctions, he will leave a loophole for universal evasion. The history of legislation proves this. It is said that if he cannot get an anti-option bill through, Farmer Hatch will attempt to have all deals for future delivery taxed as a means of raising revenue. He is in earnest, and the fact that he was sat down upon during the last Congress does not seem to dis-

hearten him. Still, he must know that any such bill as he proposes stands little chance of successfully running the gantlet of legislative action and presidential veto.

### THE WHEAT AT CHICAGO.

There is something more than 21,000,000 bushels of wheat now in Chicago, all of which except a couple of million bushels is in the public elevators. One-fourth of the visible supply and more is in Chicago, and anything affecting the integrity of this huge mass of grain is sure to have an effect on prices. Reports have gone out that the weevil has got into the grain; just as the cry of "hot corn" goes out with the approach of every summer. There is nothing in the report. The wheat now in the elevators is in better condition than usual. The elevator men cannot afford to allow the grain to get out of condition, and were any bins infested with weevil a curative dose of bisulphide of carbon could easily be administered. Only one man could be found who had seen any weevily grain from a Chicago elevator, and he attached no importance to the fact that a few berries from one elevator bin showed that weevil had been at work. The elevator men can be depended on to check attacks of the pest, should they be made; they cannot afford to do otherwise.

### CANAL TRAFFIC.

According to the figures given by Capt. De Puy on another page, it will not require a very large expenditure to open up a new era of usefulness for the Erie Canal. He estimates that to dredge out the canal another foot and lengthen the locks would cost only \$3,500,000. This done, a steamer or electric boat could push one and pull two canal boats, making such a saving in the cost of transportation that the railroads, with all their improvements in equipment, could not meet. Of course the capacity of the canal is unlimited; or, rather limited only by the number of boats. The present year it carried 51,343,626 bushels of grain and seed from Buffalo; and, with proper equipment, could have transported every bushel of grain and seed grown in the United States, had it been necessary. The day of canals and waterways is not passed.

### DEALERS' ACTIVE ASSOCIATIONS.

The Chicago Grain Receivers' and Shippers' Association is not dead, but it has been overcome by a lethargy that will require many impositions to prompt it to rouse up and again work for the interests of the trade. However, all dealers' associations are not suffering from the same complaint, and the Cincinnati, Kansas City and Duluth associations, we are pleased to say, are active.

The Duluth Association is decidedly progressive and is looking vigilantly for ways and means to advance the interests of the trade at that point. One very commendable work they have undertaken is to induce the railroads to establish a union yard which would greatly facilitate the work of the inspectors and samplers. An effort is also being made to have a sample exchange established for the convenience of buyers and sellers. Some of the big millers have been buying direct from the producers in the country, and thus cutting the commission men out of business. The miller gains little or nothing by this method, so the dealers are working together to have it stopped.

The combined efforts of dealers do not always secure the reforms or improvements aimed at, but if the energies are rightly directed and with persistent push they will succeed oftener than they fail. The fact that dealers are organized and guarding their interests protects them from many evils they know not of. Railroad companies as well as all others having dealings with grain men are chary about attacking the

members of any well organized association of grain dealers, and it is surprising that this fact alone is not sufficient to prompt dealers to organize and maintain many active associations. Of late years a number of associations have been organized by country buyers in the different states, but only one worthy of the name now remains. Buyers of every state along the same railroad should organize a fighting association and keep at work advancing as well as protecting the interests of members.

### THE ERIE CANAL.

The experiments with electricity as a canal boat motive power and the report of the large quantity of grain carried by the Erie Canal this year have been the means of attracting considerable attention to the great grain carrier and to its needs. That Prince of Hypocrites, who first recommended, then vetoed, an appropriation for the improvement of the Erie, is still striving to detract the attention of the true friends of the canal from its real wants by a chimerical scheme for running the boats through mud at lightning speed. The wonder is that he has not recommended that each boat be transposed into a flying machine. He may yet do this, for railroad stock will always overbalance common sense and good judgment.

The season just closed was a very prosperous one for the canal boatmen, and they transported more grain than for several seasons. The year before the railroads carried twice as much as the canal, this season the canal carried more than the railroads. If the channel was deepened and the locks lengthened the carrying capacity of the canal would be greatly increased, in that larger boats could be used and run much faster than at present without the aid of electricity. The governor knows this and also knows that the legislature will pass a bill appropriating money for these improvements, so he is championing the use of electricity as a motive power, that he may have an excuse for assisting the railroads in destroying the canal. As long as the channel is filled with mud electricity or any other motive power is not needed, and no friend of the canal or anyone interested in the commercial supremacy of New York will assist in securing funds for this departure. The need of a deeper channel and longer locks is urgent, and unless this is supplied soon the grain will go down the St. Lawrence and to foreign ports by routes other than via New York.

A DEPARTURE has been made recently at Chicago. The large supply of wheat has remained in store so long that the elevator men in despair of it ever being removed offered a discount for the payment of storage to date, and some offered and gave a discount on the storage paid up to May 1. They want to make the old houses return a dividend if possible.

THE close of navigation did not turn the expected stream of grain shipments to the seaboard by rail, so the Erie attempted to encourage shipments by reducing the rate Chicago to New York to 20 cents a hundred. Owing to the low prices ruling this 5-cent reduction was not sufficient to induce a material increase in grain shipments, and there has been some talk of a further reduction. It is seldom that the carriers have made a rate lower than 20 cents to New York, but the unprecedented low prices make it necessary for them to reduce the rate even further, if they will induce heavy shipments before the present supply in Eastern markets is exhausted. Most of the grain now in those markets was transported by water and at a low rate. To compete with the holders of that grain in Eastern markets, Western holders must either have a very low rate or reduce the price still further. One thing which they are not very fond of doing. If the rail carriers will induce shipments now they must make a rate of 15 cents or lower.



# EDITORIAL MENTION

READERS will confer a favor by sending us the grain news of their district.

THE Wilson Bill reduces the duty on barley from 30 cents to about 12 cents per bushel.

NO GUESSES will be accepted after this month. This is the last time we will call subscribers' attention to this opportunity to make \$50.

DO YOU want \$50? The subscriber who first guesses nearest to the amount of wheat exported during January will be given that amount.

SAVE time and labor and prevent errors by adopting the cental system. Grain is weighed and shipped on rail by the 100 pounds. If it was bought and sold by the same standard the business would be simplified.

AS FURTHER evidence of the fact that South Chicago is becoming a great grain handling center we call attention to the large storage house that is being erected on the south bank of the Calumet by Counselman & Co.

ELEVATOR risks in Detroit have been reduced to 2 per cent. for short rates and  $2\frac{1}{4}$  per cent. for annual rates. It is cheerful to know that insurance rates have been reduced even at one place. The other thing has been the rule in the West.

THE *Market Record* says there are farmers in Goodhue and Rice counties, Minn., who are carrying two and three crops of wheat in their granaries. It figures out that they would have to get \$1.20 to come out even, as they could have got 80 cents for a part of their wheat.

IN our next number we will commence a series of articles on the establishment, growth and development of our system of grain inspection. We have collected considerable information on the subject and hope to be able to give our readers a very interesting history of grain inspection.

NO further comment is necessary as to the world's wheat prices than the fact quoted by the *Liverpool Corn Trade News*, that a cargo of No. 1 California wheat was sold for prompt shipment at 27 shillings  $7\frac{1}{2}$  pence per 500 lbs, or exactly the sum charged for the freight alone a dozen years ago.

B. P. HUTCHINSON is again among the "boys" on the Board of Trade, and his card reads: "B. P. Hutchinson, commission and broker, 17 Rialto Building." Mr. Hutchinson will have some younger men associated with him. It is said that "Old Hutch" has made several profitable turns lately.

READERS will notice among the "Commission Cards" in this number the announcement of L. Everingham & Co., handlers of grain and seeds. This firm was established in 1865, and during its three decades in business has had no reverse to mar its record. No firm stands higher in the estimation of the trade.

COUNTRY grain shippers are still docked for future shrinkage at terminal elevators, and instead of protesting they meekly submit. Of course they do not mind a dockage of five or six bushels. They are used to it. A fighter will rise up some day and take the matter into

the courts in a way that will make terminal elevator men remember that there was once such a thing as justice.

IT is anticipated that carrying charges on the lakes will advance next year. The influx of at least 30,000 tons the past year pulled rates down; and the retirement of tonnage to the extent of over 20,000 tons from the general carrying trade is expected to pull rates up again in the spring. But spring is not here yet.

OUR most excellent contemporary, the *Hay Trade Journal*, has found it necessary to enlarge again. Each issue will contain 16 pages of information valuable to hay dealers. You can get it, together with the *AMERICAN ELEVATOR AND GRAIN TRADE*, for one year for \$2. Country shippers should have both journals.

OUR guessing ticket for subscribers is published elsewhere in this number. If you are not a subscriber, send in your subscription and guess. You know how much wheat will be exported during January. If you guess the nearest to the amount exported in the form of grain you will get \$50. You have only 16 days more to send in your guess.

THE statement has been made in the insurance papers that Mr. J. J. Watson of St. Paul was forming an insurance company to be known as the Grain Dealers' Insurance Lloyds, which would write risks on flour mills and elevators and begin business soon. We are informed that the project is under way, but that the announcement that it would be ready for business in a few weeks is premature.

SOME of the Chicago and New York bulls are figuring that the plethora of money which is becoming so pronounced everywhere will sooner or later lead to a "sentimental advance" in wheat before long, due to rich men buying. This is entirely probable if the rich men will all buy at one time; if they stray into the market one by one the procession is likely to get discouraged before the "sentimental advance" takes place.

THE *Winnipeg Commercial* maintains that figures will show that farmers hold their wheat when prices are high and sell when prices are low. It admits that one reason for this is that it takes more bushels of wheat to pay the farmer's obligations when price is low than when wheat brings a high price; but it maintains, nevertheless, that a high price tends to make farmers hold their wheat, while a low price acts in the opposite way.

A CASE of importance to shippers has recently been decided by the Minnesota State Supreme Court. The Home Insurance Company accepted a risk on the Soo road's elevator and warehouse at Gladstone, Mich., together with any flour, grain or other merchandise that might be stored there while in transit. The property was burned and the road sued for the insurance. The case was taken up to the highest court, which decided that if the road would insure for the benefit of owners of property, it must be stated plainly in the policy. In this case the road will have to make good to the owners their loss by the fire.

THE farmer is not so badly off as alleged statistics so often cited by prophets of calamity would indicate. The official figures for thirty-three states from the census of 1890 are, in fact, gratifying as showing the substantial condition of the American farmer. They show that three-quarters of all the farms in the United States are owned free of incumbrance. The average mortgage represents only a third of the value of the farm, and the total of the farm mortgages is only 10 per cent. of the total value of the farms. Moreover, four-fifths of the mort-

gages were either purchase money mortgages, or mortgages for improving or adding to the property.

"NAT" JONES, one of the "Big Four" of times gone by, is back again on the Chicago Board of Trade. Jones made several barrels of money on the Board and then went to New York, where he speedily became a factor in the stock market. Of late fortune has not handled him kindly and he failed a few weeks ago. Now he is back again in Chicago, and the first thing he did was to point for the Board, his old stamping ground. It is not unlikely he will have another barrel before long. He was always a shrewd operator.

A CORRESPONDENT of one of the Chicago papers has figured it all out that India can afford to put her wheat into Baltimore and New York at 45 cents a bushel, including the 20 per cent. *ad valorem* duty. This may be, of course; it is dangerous to deny anything in this last decade of the nineteenth century; but we hardly think it probable. If the correspondent's figures are correct, India wheat could have been laid down in New York at any time in the past few years at less than 70 cents per bushel, which ought to have attracted it, but it did not.

IF any of the members of Congress are counting on active opposition to anti-option legislation from the exchanges of the country, an opposition active enough to have "something in it" for members "open to conviction," they are doomed to disappointment. Farmer Hatch himself professes to be assured that with a few slight changes in his bill the Chicago Board of Trade will be perfectly satisfied; at least will offer no violent opposition. Speculation is at such a low ebb that the most malevolent enemies of the exchanges would find it hard work to make it any worse. The only danger has been that some idiotic bill would handicap all business done on the exchanges, no matter what its nature might be.

THE Decimal Association, which was organized in Great Britain several years ago to secure the adoption of the decimal system of weights, measures and moneys, is continually winning victories and securing new members. The Parliament which met at Melbourne last year declared in favor of the system, and many congresses of business men have declared in favor of it. The system is gaining ground with the grain trade of this country, and the time may not be far distant when grain will be bought and sold as well as shipped by the 100 pounds. The seed trade have adopted and the cental is used exclusively on the Pacific Coast, so it is not new to many members of the American trade, and we trust the time is not far distant when all will use it.

IN advising farmers to vote for a Patron candidate, a Canadian paper says that the Patrons of Husbandry in the vicinity of Bradford, Ont., have saved \$10,000 the past year that "otherwise would have gone to the grain buyers," and it adds that "this blood money is taken from farmers everywhere," with much more to the same effect, that government is in league with "the hawk-eyed Board of Trade men of Toronto and Montreal," and aids them by obtaining information as to the amount of grain grown. If the Patrons of Bradford or any other place can save \$10,000 by co-operation, that is their own affair and their good fortune. But how the government publication of crop news hurts the farmer we are unable to see. If there were no news obtainable, the farmer would be just as likely to part with his grain at too low a price as too high a price. The idea that the only people to suffer by the suppression of crop news would be dealers and consumers is preposterous.



**IMPORTS AND EXPORTS OF FOREIGN BREADSTUFFS.**

According to the latest report of the Bureau of Statistics at Washington, barley, aggregating 86,582 pounds, was imported in October, against 101,413 pounds imported in October preceding; and during the ten months ending with October 867,367 pounds were imported, against 1,033,891 pounds imported during the corresponding months preceding. Corn amounting to 55 bushels was imported during October, against 37 bushels imported during October preceding; and during the ten months ending with October 177 bushels were imported, compared with 917 bushels imported during the corresponding months of the year preceding.

There were 140 bushels of oats imported in October, against 417 bushels imported in October, 1892; and during the ten months ending with October 17,228 bushels were imported, compared with 14,813 bushels imported during the corresponding months of 1892. There was no rye imported in October and none in October, 1892; during the ten months ending with October 8,505 bushels were imported, against 110 bushels imported during the corresponding months of 1892. Wheat aggregating 298,990 bushels was imported during October, against 55,646 bushels in October preceding; and during the ten months ending with October 601,910 bushels were imported, compared with 1,078,026 bushels imported during the corresponding months of the year preceding.

Of imported barley there was none re-exported in October and none in October, 1892; and during the ten months ending with October 28,983 bushels, valued at \$14,493, were re-exported, against 86,505 bushels, valued at \$46,531, re-exported during the corresponding months of 1892. No oats were re-exported in October and none in October, 1892. There was none re-exported during the ten months ending with October, compared with 3,073 bushels, valued at \$1,047, re-exported during the corresponding months of 1892.

No rye was re-exported in October and none in October, 1892. There was none re-exported during the ten months ending with October, against 4,175 bushels, valued at \$3,340, re-exported during the corresponding months of 1892. There was no wheat re-exported in October, against 29,694 bushels, valued at \$14,747, re-exported during October preceding; and during the ten months ending with October, 197,177 bushels, valued at \$140,654, were re-exported, compared with 1,770,601 bushels, valued at \$1,293,477, re-exported during the corresponding months of the year preceding.

**IMPORTS AND EXPORTS OF SEEDS.**

According to the Bureau of Statistics seeds valued at \$1,735,614 were exported during October, against an amount valued at \$653,149 in October preceding; and during the ten months ending with October seeds valued at \$4,236,247 were exported, compared with an amount valued at \$3,674,322 exported during the corresponding months of the year preceding.

Clover seed aggregating 9,985,039 pounds were exported during October, against 968,298 pounds exported in October, 1892; and during the ten months ending with October 17,266,194 pounds were exported, compared with 7,051,155 pounds exported in the corresponding period of 1892. Cotton seed amounting to 124,000 pounds was exported in October, against 116,480 pounds exported in October, 1892; and during the ten months ending with October 2,163,251 pounds were exported, compared with 7,115,462 pounds exported during the corresponding period of 1892. There were 416,957 bushels of flaxseed or linseed exported in October, against 403,319 bushels exported in 1892; and during the ten months ending with October 1,268,641 bushels were exported, compared with 2,187,132 bushels exported during the corresponding period of 1892. Timothy seed aggregating 1,587,548 pounds was exported in October, against 301,827 pounds exported in October, 1892; and during the ten months ending with October 7,347,478 pounds were exported, against 7,630,276 pounds exported during the corresponding months of 1892.

Linseed or flaxseed aggregating 82,857 bushels, valued at \$87,702, was imported during the month of

October, against none imported in October preceding, and during the ten months ending with October 217,521 bushels, valued at \$253,832, were imported, compared with 46,794 bushels, valued at \$55,459, imported during the corresponding months of the year preceding. All other seeds valued at \$30,663 were imported in October, against an amount valued at \$23,732 in October preceding, and during the ten months ending with October all other seeds valued at \$375,211 were imported, against an amount valued at \$237,526 imported during the corresponding months of the year preceding.

**ENFORCEMENT OF THE INTER-STATE COMMERCE LAW.**

The work of the Interstate Commerce Commission is becoming more effective, and carriers are heeding more of the provisions of the law. In its last report the commission states that many railway managers, unable to set aside the training received in railway service prior to the passage of the act to regulate commerce, view obedience to that statute from the standpoint of a private corporation rather than that of the public agency. In some judicial proceedings, also, the design of the act to prevent, as well as cure, transportation wrongs, and that its provisions should be construed liberally in favor of the reforms it was intended to effect, have not been fully recognized. But resistance to regulation is diminishing, and the trend of judicial decisions is toward holding interstate rail carriers to more rigid performance of their public functions.

The law was intended to bring about substantially reasonable charges, reduce pernicious favoritism to a minimum, and make carriers bear in mind the statutory admonition to refrain from giving undue preference in rates or facilities to persons and places. Although all expectations have not been fully realized, the operation and administration of the statute have brought about reforms in transportation which, compared with the evils that existed prior to the law, amount to commercial emancipation.

Extortionate charges are seldom the subject of complaint, and an immense amount of injustice, caused by improperly adjusted rates and by preference in facilities, has been corrected by the commission. The effect of a ruling of the commission, directing revision of rates, is shown not to be confined to relieving grievances of particular persons; it extends to all who use these rates, and frequently affects rates on other lines. The act provided what the common law did not afford—a procedure by which to test the relation of rates charged to different persons and at different localities. The fear of greater discriminations or exactions no longer deters persons from complaining of carriers' illegal acts. A carrier has not now the power to punish shippers for protesting against its wrong-doing.

The policy of the commission has been to make proceedings before it as simple as possible, keeping in view the necessity of basing any authoritative action upon due process of law. There is comparatively little and often no expense to complainants in proceedings before the commission. The commission may be directly communicated with by any shipper or passenger feeling himself aggrieved. The homely phrases of the farmer and the concise sentences of the busy manufacturer are found in the correspondence of the commission as often as the carefully chosen words of the legal adviser. These informal complaints form a great and important part of the commission's work. The different methods of regulation under the law are described.

A good bounty is paid by North Dakota on potato starch made in the state, yet but one factory has been established. This would indicate that the profits from such an enterprise are not large. The raw material to be had is of fine quality and very cheap, and the natural advantage in that respect will more than counterbalance transportation charges. The reason more factories are not started is laid to the fact that the profits of the business are uncertain, as had the one factory which was established proved profitable the fact and figures would probably have been well known.

**Trade Notes.**

Guess this month, or never.

G. W. Crane & Co., manufacturers of elevator and mill supplies at Minneapolis, Minn., have recently filed articles of incorporation.

Cutting off your advertising at this particular time and in this particular emergency is virtually hauling down your flag. It is an acknowledgment that things are not well with you; it is giving unnecessary cause for alarm; it is shaking confidence in the times; it is one way of talking disaster when you know there is no reason to "turn tail and run."

George M. Randall has purchased the entire business of Stuart Hare of Enterprise, Kan., and has secured from the Barnard & Leas Manufacturing Company of Moline, Ill., the agency for the sale of their machinery in the states of Kansas, Colorado and Oklahoma. He is prepared to furnish estimates for mills or elevators of any capacity, or orders for special machines on short notice.

The Charter Gas Engine Company of Sterling, Ill., writes us that "Our November sales amounted to more than the sum of the September and October sales combined, and were over 25 per cent. in excess of any other month this year. Take it all in all, we have nothing to complain of this year, at least comparatively, for while we have not done near the business we expected to do, and would have done, if the times had been better, yet we have had more business than the hard times and depression caused us to expect."

The Kansas City Metal Roofing and Corrugating Company, 108 Builders' Exchange, Kansas City, Mo., is one among the few concerns not affected by the general depression in business. While no doubt their sales would have been greatly augmented by better times, yet during all the dull times prevailing throughout the country, they have steadily widened their field and increased their business, till now they take rank among the largest concerns in the West. They attribute this largely to judicious advertising and meeting the demand for the lowest possible prices consistent with honest goods. They never take a back seat when it comes to meeting legitimate competition in prices, and with their facilities for prompt delivery and low freight rates to all points in the West and South, they rarely fail to capture the orders, whether for carloads or less. Their line embraces corrugated iron in all its forms, for roofing, siding and ceiling, standing seam roofing, steel and one-third steel, both self-capping and in rolls, V-crimp, beaded ceiling, steel imitation brick, etc. They also handle the famous Empire Sheathing and all other kinds of building paper, and felt roofing, mineral wool, iron cresting, woven wire fencing, iron fencing, wire railing, etc. Our readers will do well to correspond with them, whether for immediate or future wants.

**IMPORTS AND EXPORTS OF HAY.**

Hay aggregating 8,178 tons, valued at \$71,925, was imported in October, according to the report of the Bureau of Statistics at Washington, against 6,855 tons, valued at \$59,791, imported during October, 1892; and during the ten months ending with October, 86,421 tons, valued at \$797,867, were imported, compared with 66,108 tons, valued at \$644,038, imported during the corresponding months of 1892.

Of imported hay 120 tons were re-exported during October, compared with none re-exported in October preceding; and during the ten months ending with October, 120 tons, valued at \$1,125, were re-exported, against 151 tons, valued at \$1,387, re-exported during the corresponding months of the year preceding.

We exported 3,070 tons of domestic hay, valued at \$47,966, in October, against 2,638 tons, valued at \$41,960, in October, 1892; and during the ten months ending with October, 32,972 tons, valued at \$526,315, were exported, compared with 28,871 tons, valued at \$472,095, exported during the corresponding months of 1892.



# ELEVATOR

## GRAIN NEWS

W. C. Charles, a grain dealer at Broughton, Ill., has sold out.

E. F. Osborn & Co. have bought the McLane Elevator at Litchfield, Minn.

Kaiser & Co.'s new 75,000-bushel elevator at Mt. Olive, Ill., is completed.

A new cotton seed oil mill was recently put in operation at McKinney, Tex.

Adler, Morris & Co., brewers of Birmingham, Ala., have gone out of business.

A grain elevator is in process of construction at Ottawa, Can., by A. Leeder.

George Hanna has recently erected a large grain warehouse at Basswood, Man.

The Vicksburg Cotton Oil Company at Vicksburg, Miss., have sold their oil mills.

Chas. Mann has succeeded to the grain business of Chas. Mann & Co. at Mayville, Wis.

The 10,000-bushel elevator of W. N. Lehman at Shepherdstown, W. Va., is completed.

Carter & Strong will build an extensive addition to their grain store at Manchester, Conn.

Rickart & Goodell, a grain commission firm of St. Louis, Mo., have dissolved partnership.

The tow mill at Heron Lake, Minn., is now handling 30 or 40 loads of flax straw per day.

Louis F. Carr, the swindling grain dealer, has been pursued to Denver by Quebec detectives.

Warehouses in which to store wheat are being erected by Mr. Wells at Forest City, S. D.

Doon & Co. of Willimantic, Conn., have purchased the grain business of Arnold & Chapman.

J. P. Gibbons has succeeded the firm of J. P. Gibbons & Co., grain dealers at Kearney, Neb.

Over 200,000 sacks of grain were delivered at Santa Maria, Cal., up to the middle of November.

The Cypress Farmers' Elevator Company, Ltd., at Cypress River, Man., has been incorporated.

E. E. Hettel, dealer in hay and grain at Anderson, Ind., has been succeeded by Etchison & Miller.

The grain and stock commission firm of Buxbaum & Co. at Chicago, Ill., have dissolved partnership.

The cost of Wilson & Johnson Bros' new elevator and roller mill at Luverne, Minn., is about \$18,000.

Payne & Rich have succeeded the firm of J. C. Payne, dealer in grain and hides at Wharton, Tex.

The elevator men at Detroit, Minn., have been kept busy recently by the rapid stream of incoming wheat.

The new rice mill at Orange, Tex., has started up and has a capacity to polish 50 barrels of rice per day.

The Germania Malt Company has been incorporated at San Francisco, Cal., with a capital stock of \$50,000.

Bartholomew Kiely at Providence, R. I., has recently completed a four-and-a-half-story brew house.

The elevator owned by Smith & Brigham at Moosomin, Assa., is now illuminated throughout by electricity.

The Nebraska Grain & Milling Company has been formed at Beatrice, Neb., with a capital stock of \$50,000.

The Seymour Grain Company at Chicago, Ill., has been licensed to incorporate with a capital stock of \$50,000.

The Grand Rapids Brewing Company of Grand Rapids, Mich., have recently completed a new brewery.

Frank Goodnow has succeeded J. M. Thirds as vice-president of the Midland Elevator Company at Kansas City, Mo.

The Juniper Distilling Company at Chicago, Ill., has been licensed to incorporate with a capital stock of \$3,000.

The Georgia cotton seed oil mills at Macon, Ga., have completed their new plant, which is now in operation.

The Gulf City Mill, owned by the Alabama Cotton Oil Company at Mobile, Ala., has been completed and is now in operation. The plant was built to replace

the mill which was burned two years ago, and is equipped with the latest improved machinery.

The new brewery of the Fred Krug Brewing Company at Omaha, Neb., was formally opened on November 17.

The partnership heretofore existing between Husted & Ware, a grain commission firm of Chicago, Ill., has been dissolved.

The partnership existing between Johnson & Law, dealers in grain and coal at Pawnee City, Neb., has been dissolved.

The weekly paper at Milnor, N. D., offers to accept wheat at 75 cents per bushel on subscription accounts until January 1.

The new Eastern Elevator Company at Buffalo, N. Y., are now lodged in new quarters in the Board of Trade Building.

The Ottawa Brewing and Malting Company has been incorporated at Montreal, Que., with a capital stock of \$15,000.

Geo. Hock, dealer in grain and lumber at Scales Mound, Ill., has changed the style of the firm name to Geo. C. Hock.

John C. Fears and John A. Warren have in contemplation the purchasing of the Lewis-Sharp Elevator at St. Louis, Mo.

The new 500,000-bushel annex to elevator "C" at Minneapolis, Minn., has been in operation since the middle of November.

Tyler & Co. have completed their new elevator and mill at Junction City, Kan. The elevator is a 15,000-bushel frame structure.

The Dotterweich Brewing Company at Olean, N. Y., will erect a three-story brick building to replace their old frame brewery.

L. B. Wilcox has leased the Alliance Elevator and will not rebuild his elevator, which was recently burned at Glen Elder, Kan.

The new Mulford Elevator at Minneapolis, Minn., having a capacity of 1,000,000 bushels, received its first wheat on November 22.

The Big Four grain elevator warehouse and adjoining docks at St. Joseph, Mich., are now lighted by 34 incandescent electric lights.

The cotton seed oil mill of the Etowah Alliance Manufacturing Company at Gadsden, Ala., has been purchased by W. R. Reynolds & Son.

S. B. Shepherd of Omaha, Tex., who is largely interested in grain elevators has recently been buying up sugar lands in Brazoria county, Tex.

The Farmers' Elevator Company at St. Peter, Minn., have erected a large corn house near the elevator, and hereafter will buy corn as well as wheat.

The Interstate grain house at Clara City, Minn., came very near collapsing recently, being overtaken with pressure. One end sagged out about two feet.

The elevator at Pepin, Wis., has been opened by Emil Langers, who commenced buying grain November 13. The elevator will be in charge of C. M. Francis.

Owing to the hard times the *Farmington Forum* of Washington says: "Don't forget that we will take wheat upon subscriptions. First-class wheat at 50 cents a bushel."

The elevator at Glenwood, Minn., owned by the Monarch Elevator Company, has a capacity of 20,000 bushels, and is under the local management of P. M. Ferguson.

H. O. Barber & Son, proprietors of the Kendall & Smith elevator at Wallace, Neb., have engaged J. P. Harding to take charge of their grain business during the winter.

Henry Torpin of the grain firm of Torpin & Son of Oakdale, Neb., has gone to Deadwood, S. D., where he has opened a distributing branch establishment for the firm.

Fred Mason, who was formerly with Griggs Bros. at St. Paul, has bought out the Covey plant at Worthington, Minn., and organized a company for the purchase of hay.

Warfield & Swans is the style of a new firm in the grain business at Buffalo, N. Y. Mr. Warfield was for several years the agent of Bartlett, Frazier & Co. of Chicago, Ill.

The Northern Central Railway Company has built a two-story hay warehouse of 1,000 tons storage capacity at Baltimore, Md. It will be operated under lease by the Terminal Warehouse Company of Baltimore.

The farmers of Eastern Washington have been very much in need of a warehouse in Tacoma this season. This they had thought of building, but the hard times delayed its erection. If the building had been erected

and provided with means for cleaning and drying it would have saved many times its cost. Another season will probably see its construction.

John L. Cramer, dealer in hay, grain and feed at New York, N. Y., made an assignment on December 6 to Max L. Ransom without preferences.

The Velasco Oil Mill at Velasco, Tex., is obliged to run day and night to take care of its growing trade. The quality of the output is pronounced by experts equal to the best.

The Oscar Altpeter Grain Company at Milwaukee, Wis., has leased its premises for a term of years to Philip Jung. The company's plant includes a malt-planting establishment.

The Nye & Jenks Grain Company at Chicago, Ill., has been incorporated with a capital stock of \$60,000. The incorporators are James N. Jenks, Ray Nye and Alexander O. Mason.

During the five weeks ending with November 25 there were 1,043 cars of wheat inspected at Winnipeg, Man., against 1,692 cars inspected for the corresponding weeks of last year.

The Sawyer Grain Company has been incorporated at Minneapolis, Minn., with a capital stock of \$25,000. The incorporators are John Dunnett, Donald Morrison and James Macrae.

Grain has been received for some time at San Miguel, Cal., at the rate of 2,000 sacks per day. At some parts in that vicinity grain was still in the field as late as November 10.

The Bemis & Curtis Malt Manufacturing Company at Chicago, Ill., malt barley on commission for barley shippers all over the West. This is the first known instance of a firm doing this.

George W. Beggs has brought suit at San Francisco, Cal., to recover \$481.18 from Cutler & Mosley claimed to be a balance due on an open account for grain shipped and delivered to the firm.

The shipments of grain and way freight at Modale, Ia., for the month of October amounted to thirty-five cars. During September the shipments of grain and way freight aggregated sixty-two cars.

The Cheney Elevator at Spokane, Wash., has a capacity of about 120,000 bushels with a good steam plant which is capable of turning over and fanning out a large amount of grain every day.

The Pacific Hay & Grain Company of St. Louis, Mo., with their new large elevator and warehouse, have ample facilities to handle their large wholesale city business and extensive order trade.

The Monarch Elevator Company of Minneapolis, Minn., will build immediately a 25,000-bushel elevator at Voss, N. D., to take the place of their house which was burned at that place on November 11.

The Chicago & Northwestern Elevator Company has been incorporated at Chicago, Ill., with a capital stock of \$500,000. The incorporators are James Patton, Adolph Traub and Francis O. Lyman.

The Kaufman Grain Company has been incorporated at Claytonville, Ill., with a capital stock of \$7,500. The incorporators are John P. Kaufman, William S. Kaufman and Henry C. Ziegenhorn.

The American National Grain Company at Chicago, Ill., has been licensed to incorporate with a capital stock of \$1,000,000. The incorporators are H. Montrose Lewis, H. S. Heron and Emory D. Frazer.

The failure of J. W. Brown on the Consolidated Exchange at New York, N. Y., took place on November 22. Mr. Brown was long on wheat and short on stocks, the markets for both of which went against him.

Two cargoes of wheat, one out of one elevator and one out of another at Chicago, Ill., did not prove very satisfactory to the buyers recently and were refused. The elevator in each instance ran the grain back.

Colton Bros. of Bellefontaine, O., have recently completed an addition to their elevator, making a capacity of 100,000 bushels. They have now one of the most complete elevators in the interior of the state.

A new firm of grain brokers has lately been established at Winnipeg, Man. The firm is known as Wilson & Co., and is composed of John Wilson, a grain buyer of Mark Lane, and S. B. Flower of Brandon.

The Chattanooga Cotton Company of Chattanooga, Tenn., has recently been incorporated, to build grain elevators, cotton compresses, etc. The incorporators are F. M. Thompson, J. D. Whitaker and others.

The round elevator at Morris, Minn., is now complete and ready for grain. The power is furnished by an 8-horse power gasoline engine. The gas in the engine is exploded by electricity instead of by a heated tube.

Edwards Brothers have contracted for the machinery for a new grain elevator, which they will put into their block on Saginaw street at Flint, Mich. They have space for the storage of many thousand bushels of grain in the upper stories of their building, and



the increasing business necessitates the utilizing of every cubic foot of their space. Power will be taken from W. A. Paterson's factory, which is just across the street.

The Minneapolis & Northern Elevator at Bathgate, N. D., burst open recently letting 10,000 bushels of wheat spread over the ground. A crew of men with teams were obliged to work all night cleaning up the debris.

It is estimated that over 100,000 bushels of wheat will be marketed at Millbank, S. D., this season. The grain has been coming in at a rapid rate. This is thought to be a good record for the first crop in a new country.

The elevators at Neepawa, Man., have been crowded by incoming grain for some time. It has been a serious question with buyers at times as to where they would store the large amount of grain that was daily coming in.

Work on the Foreman Milling Company's elevator and flour storage warehouse at Superior, Wis., will be pushed forward with all possible dispatch this winter. Competitive plans for the buildings are now being received.

The Huron Manufacturing Company of Huron, S. D., are contemplating the removal of their hemp and tow mill to Mankato. They ask from Mankato a site for their factory and a bonus to pay the cost of removing to that city.

The Kentucky Malting Company at Louisville, Ky., made an assignment on November 15. The liabilities are estimated at from \$150,000 to \$170,000 and the assets at \$300,000. The president of the company also made an assignment.

The elevator at Redwood Falls, Minn., owned by C. W. George, has been purchased by G. W. Van Dusen & Co. for \$3,000. The elevator is designed to take the place of the Van Dusen Elevator, which was burned at that place recently.

William Hupp was arrested November 6, charged with embezzling the funds of the Miller Grain & Elevator Company of Wichita, Kan., for whom he was agent. The exact amount claimed to be embezzled has not been ascertained.

There has been a complaint from the shippers in the valley of the Big Bend, Wash., that Tacoma exporters are accustomed to cheating in grading grain and they threaten to ship to the dearer port at Portland unless they get fair play.

The Minneapolis Grain & Feed Company of East Minneapolis, Minn., besides doubling its warehouse capacity lately is now building a brick office 32x40 feet and two stories high. The company has built up a large trade in feed and cornmeal.

The facilities for receiving grain at Tacoma, Wash., have proved adequate for receiving the large amount of grain that has been marketed there, yet the lack of room has at times caused some uneasiness that the grain movement would be retarded.

In the case of the First National Bank of Bessemer, Mich., vs. Kansas Grain Company on a note of large amount the jury brought in judgment for the plaintiff. They were awarded \$1,309.34 and 8 per cent. Stay of execution was allowed for three months.

A block in traffic on the water front at San Francisco, Cal., occurred at the close of November, caused by the influx of grain from both north and south. The sea wall was stacked with grain and much more was due to arrive for which there was not adequate room.

Constables at Fisher, Minn., have been doing a rushing business levying upon and hauling to Fisher, Minn., wheat that had been mortgaged for store bills. In each case the storekeepers had detected the owners of the wheat in double dealing and were forced to foreclose.

The Simpson & Robinson Company of Minneapolis, are erecting a 1,500,000-bushel storage elevator for Chas. Counselman & Co. at South Chicago, Ill. The site is on the south bank of the Calumet River just across the stream from the big clearing elevator erected last year.

We shall not have the opportunity again of calling attention to our guessing contest through the columns of these pages. The contest closes with the end of the present month. That will leave two weeks for all who have not done so to send in their guesses. Have you made a guess?

The receivers of barley, and the maltsters at Chicago, Ill., are not in favor of the proposed ad valorem duty on barley and malt. They favor a specific duty as they claim that the proposed change admits of possible irregularities which will damage the interests of the Western farmer.

It is claimed that the wheat shipments at Tacoma, Wash., have been practically under the control of two big firms who pay 51 cents for wheat at Tacoma and receive 90 cents at Liverpool, making a profit estimated at 15 cents per bushel. In order to force the shippers to raise the price arrangements have been made to secure the control of a large mill already

fully equipped to turn out buckwheat and Graham flour, cornmeal and chopped feed. Thus being enabled to hold back the supply, it will force the buyers to raise their price.

Scarcity of grain sacks at Elma, Wash., and neighboring towns is causing inconvenience among wheat dealers in moving the enormous amount of Big Bend wheat. Some buyers are contemplating shipping in bulk, but the objection to this would be that it would be more difficult to grade.

The first cargo of grain for the new Eastern Elevator at Buffalo, N. Y., arrived on November 10 on the propeller George W. Roby. The cargo consisted of 80,000 bushels of corn, and the work of unloading went off smoothly. The elevator is now entirely completed and is receiving grain.

The Atlantic Elevator Company has a large elevator at Glenwood, Minn., with a capacity of 40,000 bushels. It is one of the largest on the Soo line west of Minneapolis. The elevator is equipped with all necessary machinery and is run by horse power. F. L. Bradley is the local manager.

The O'Keefe Brewery Company of Toronto, Ont., Limited, have completed the rebuilding of their extensive establishment at Toronto, Ont. The brewery is practically new in all parts, and covers with its malting plant a site of 123x315 feet, with a special storage building on another block.

C. C. Rogers and George Knowles, Jr., have formed a partnership and opened an office at Milwaukee, Wis., for doing a grain, stock and commission business. The style of the firm will be Rogers & Knowles. Both members of the firm have been for a long time connected with the grain interests.

The Phoenix Hay & Grain Company of Phoenix, Ariz., on November 18 shipped a sample car of alfalfa hay to New Orleans, La. It was reputed that the sample car would undoubtedly lead to considerable trade in the East and foreign countries. Three cars were recently shipped to Galveston, Tex.

During the months ending with August 1 the elevator at Fremont, O., shipped 24,583 bushels of wheat, 9,000 bushels of corn, 13,000 bushels of oats, 600 bushels of clover seed and sold 200 barrels of flour. This was considered very good for a small town that has also a large and thriving mill running steadily.

The Lansing Co-operative Association, doing a grain and general merchandise business at North Lansing, Mich., has changed ownership. A. L. Harlow, who has been the manager for the past two years, has bought out the interest of the stockholders and will continue the business under the new ownership.

A. McLeod, an implement and furniture dealer of Souris, Man., recently offered to allow 50 cents per bushel for No. 1 hard wheat delivered to him in payment of open accounts for ten days. This price was considerably above the market value, about 40 cents being the market price when the offer was made.

The Brimson-Judd Grain Company has been incorporated at St. Louis, Mo., and will erect an elevator at that place which will have a capacity of 100,000 bushels. Mr. Brimson has long been a large handler of grain in the Southwest, and has warehouses at twenty stations along the line of the 'Frisco road.

The grain warehouses at Redondo, Cal., are crowded to their fullest capacity with corn, barley and wheat. Large quantities of hay and grain have covering near the railroads and wharf so that it seems that Redondo will be compelled to erect more warehouses for the reception of the grain from the surrounding country.

E. R. Ulrich & Son, grain merchants at Springfield, Ill., now buy grain at the following points: Illiopolis, Lanesville, Buffalo, Dawson, Riverton, Barclay, Sanger, Curran, Bates, Central, Athens, Laomi, Chalieomb, Medora, Springfield, Chatham, New Berlin, Maxwell, Waverly, Rohrer, Modesto, Island Grove, Arapahoe, Neb.

Crarer & Husman, grain dealers at Laporte, Ia., have erected a new office and scale house near their elevator. One of the objects in putting up the new building was to have the office and elevator separate, so as to minimize as much as possible all danger of fire. In the future there will be no fire of any kind in or near the elevator.

The Pierce Bros. Commission Company of Kansas City, Mo., brought suit on November 28 against the Germania Insurance Company of New Orleans, La., for \$12,250 insurance on 30,000 bushels of grain which was stored in the Kansas elevator at the time it burned in March last. Pierce Bros. alleged that they had made proof of loss to the company, but that it refused to pay them.

Abner L. Backus of the Union Elevator Company of Toledo, O., after being long annoyed by the sheet piling of an abandoned abutment in the river near his elevator, has finally secured an end to the evil. He asked the state board of public works to compel the Lake Shore & Michigan Southern Railroad Company to remove the obstruction. The state board referred the matter to the attorney general, who decided that the board had authority to compel the Lake Shore Company to remove the piling. He also

gave as his decision that Mr. Backus had relief in the courts for the damage he had sustained. The sheet piling had been for a long time a source of annoyance to elevator men.

The wheat buyers at Brown's Valley, Minn., estimate that nearly three-fourths of the wheat at that point has been already marketed. The total amount has been something over 120,000 bushels. In spite of the low prices there has been a much smaller quantity stored this year than last.

At the close of November there was a complaint of a scarcity of ears in Western Iowa and Eastern Nebraska. Grain elevators all through the grain country were filled to their utmost capacity, and buyers had withdrawn from the markets on account of their inability to secure cars to move grain and make room for more purchases.

F. Braasted & Co. will erect a new grain warehouse at Ishpeming, Mich., on the site of the building recently destroyed by fire. The building will be a wooden structure, with iron sheeting. The building will occupy as much ground as the old one and will be more substantially and conveniently put up. It will be completed as soon as possible.

The board of directors of the Farmers' Terminal Warehouse Company was in session at Tacoma, Wash., recently completing arrangements for terminal facilities at that place. The capacity of this proposed plant will be about 300,000 bushels. It is, however, possible that the committee will decide to lease instead of building a warehouse for the present.

Samuel Foltz, the senior member of the grain firm of Foltz & Arras at Jenera, O., who mysteriously disappeared recently has not been heard from. On November 29 Mr. Arras made an assignment of their elevator and general store for the benefit of their creditors. The liabilities are put at \$5,000 or \$6,000, and it is thought their assets will fully cover that amount.

The capital stock of the Zenith Elevator Company of Duluth, Minn., which was recently incorporated, is \$50,000. The new wheat hospital and feed mill on Rice's Point will be operated by the company. The officers are: William C. Bond, president; J. D. Ellis, vice-president; A. Rockwell, secretary and treasurer. The directors are Samuel C. Bond and B. D. Noxon.

The new roller mill elevator at Mt. Pulaski, Ill., has been running for some time, and the machinery and conveniences for handling grain are about perfect. The engine is found equal to the additional work since the roller mill and all the machinery of the new grain elevator which adjoins it is kept in full motion without any perceptible difference in the steam power.

Very little damaged wheat has been coming into Tacoma, Wash., recently. The Puget Sound Flouring Mill Company is said to have about 1,000 tons of damaged wheat piled in its warehouse. Balfour, Guthrie & Co. at the close of November had about 65,000 sacks of damaged wheat in their warehouse. Those amounts comprised about all of the rejected grain on hand at that time.

The retail grain, feed and hay dealers of St. Louis, Mo., have perfected their organization. They have secured the promise from the elevator managers that they will open their houses from 7 A. M. until noon and from 1 to 5:30 P. M. The following officers were elected: President, John H. Kraacke; vice-president, C. H. Meyers; secretary, George R. Robinson, Jr.; treasurer, James F. Quinlivan.

If parties who load grain for Eastern markets would strengthen car doors by an extra cleat—especially if placed diagonally—they would greatly lessen the complaints on account of leakage. The fault of the loss of leakage of grain in transit appears to be in the weakness of the temporary car doors, as the large quantities with which the cars are loaded bulge the doors out and the result is a gradual shrinkage.

The following are some of the recent sales of Cutler & Co. of North Wilbraham, Mass., of their steam meal and grain dryer: Four No. 3 dryers to the Wash Distillery at Terre Haute, Ind.; two No. 2 dryers to W. H. Haskell & Co. at Toledo, O.; two No. 2 dryers to the Shellabarger Mill & Elevator Company at Decatur, Ill.; two No. 3 dryers to Hagerty, Hunter & Co. at Peoria, Ill.; one 30-inch mill to N. L. Pratt at Sudbury, Mass.

The contract for the building of the new Coatsworth Elevator at Buffalo, N. Y., has been awarded to James Stewart & Co. The contract calls for the completion of the building by June 1, 1894. The cost of the structure will be \$300,000. It will be 80x102 feet, and the main building will be 160 feet high. The bins will be 80 feet in depth and it will be possible to handle 20 ears inside of the elevator at once. The capacity of the elevator will be 700,000 bushels.

During the past year the increase in the storage capacity of elevators at Minneapolis, Minn., has been nearly 3,000,000 bushels. Over a third of a million dollars has been expended in this direction, and the storage capacity, which, in the beginning of the year, was slightly over 18,000,000 bushels, is now over 21,000,000 bushels. The new elevators that have been erected, together with the capacity of each, are the F. H. Pea-



vey Elevator, with a capacity of 1,000,000 bushels; the Great Western Elevator, with a capacity of 1,100,000 bushels; the Empire Elevator, with a capacity of 500,000 bushels, and the annex to the Security Elevator, with a capacity of 200,000 bushels.

The movement of grain from the interior of the state of California has greatly slackened. A large part of the crop has been moved, and the grain yet remaining in the interior is held by men who are in a financial condition to hold it awhile. The largest proportion of the crop yet unmoved was in the Salinas valley. Every warehouse along the line of the railroad between Gilroy and Santa Margarita is filled to its utmost capacity with wheat. Last year the crop of the Salinas valley was about 45,000 tons. This year the crop is estimated at 93,000 to 95,000 tons.

During the first of November the large warehouses at San Diego, Cal., were filled to their utmost capacity with wheat and barley which was being held for shipment. W. W. Stewart & Co.'s warehouse contained 65,000 sacks of wheat and barley, and at W. E. Howard's warehouse there were 20,000 sacks more. There was enough grain at Oceanside and Murietta to make in round numbers about 300,000 sacks stored in the three cities. About 300,000 sacks of this year's crop had already been shipped from the San Diego port.

In the case of George A. White vs. Mahlon S. Watkins, which was tried recently at Kokomo, Ind., the jury returned a verdict giving White possession of the grain warehouses and elevators at Kokomo, Center, Terre Hall and Nevada, and judgment against the defendant in the sum of \$200. The plaintiff is an extensive grain merchant of Toledo, O., and the warehouses of which he secured possession were controlled by the defendant. The line of elevators will be at once put in active operation under their new management.

The trustees of the Merchants' Exchange of Buffalo, N. Y., in discussing the question of freight discrimination at a recent meeting, voted to demand of the Western roads a through billing privilege, the same as enjoyed by Peoria, Chicago, Detroit and other cities. With this privilege secured a shipper could bill his stuff through and then stop it off if he should wish to handle it at Buffalo. It was thought that such a concession would materially increase the importance of the Buffalo grain market. The rates were also subject to change, which upset any calculation that could be made. It was averred that the rate against Buffalo to the seaboard in the middle of November was 3 to 7 cents per hundred.

A case has been brought into the courts at Crookston, Minn., which will probably decide whether gambling debts can be collected by due process of law. James E. Sullivan of East Grand Forks, S. D., not having the ready cash to keep his margins good while experimenting in the wheat pit, gave notes to his brokers instead. As the notes matured instead of paying them he allowed them to accumulate until they amounted to \$1,600. The notes were finally sold to the Merchants' National Bank of Grand Forks, and the bank has sued to recover the amount of the notes. Mr. Sullivan claims that wheat gambling and bucket shops are illegal in North Dakota and refuses to pay the notes. The case had not yet been decided.

Frank Johnson recently brought suit in the United States District Court against Bailey & Bartlett, formerly proprietors of an elevator and mill at Baldwin, Wis., but now residing in Minnesota. The action was for damages for an injury sustained by the plaintiff, Frank Johnson, in 1875, when he was a child of about five years, and was instituted the day after he was 21. A shaft running from the elevator to the mill of the defendants at Baldwin crossed ground which it was claimed was used as a playground by children of the neighborhood, and the lad caught his right foot in this shaft, crushing it so badly that amputation was necessary. It was alleged by the plaintiff that his foot was caught in a knuckle of the shaft which was carelessly left uncovered.

The United Elevator Company at St. Louis, Mo., was a steady and heavy buyer of December wheat during the first of December, and it was believed that they controlled all the stock in store at St. Louis except that owned by President Haarstick of the Barge Line and J. B. M. Kehler, miller. Neither of these would be likely to part with any of their wheat, as they have use for it. This being the case, it seems that the shorts on December wheat in the St. Louis market will get singed if they do not hasten to get out of it. With prospects that the receipts of wheat during December will not be more than enough, if indeed they are sufficient, to meet current requirements, the December shorts will find it difficult to get enough wheat to fill their contracts. It has seemed probable that millers as well as shippers and buyers for outside mills would be obliged to go to the United Elevator Company for supplies.

The marine shipments of wheat at Toledo, O., during the season just closed aggregated 9,801,981 bushels, against 16,519,739 bushels during the season of 1892. The shipments of corn aggregated 5,060,708 bushels, against 3,706,777 bushels. The shipments of flour amounted to 156,505 barrels, against 172,245 barrels, and of 267,956 sacks, against 180,396 sacks.

## Fires, Casualties, Etc.

Christ. Andy's brewery at Farmington, Wash., has been burned.

W. S. Adams, dealer in grain at Kendrick, Idaho, has been burned out.

S. H. Hawes & Co.'s grain elevator at Richmond, Va., has been burned. Insured.

Guess on the wheat exports for January this month or never. Guess now or lose \$50.

The Northern Grain Company at Bayfield, Wis., was burned out on the morning of November 14.

Porter & Longaus' grain warehouse at Houstonia, Mo., was destroyed by fire recently. Loss \$5,000.

The Duffey Elevator at Leavenworth, Kan., was burned November 20, with 5,000 bushels of corn.

A grain elevator at St. Joseph, Ill., was destroyed by fire on December 6. Loss \$7,000; insurance \$3,000.

Julius B. Billard of Topeka, Kan., recently suffered a loss by the burning of his elevator and mill at that place.

The Monarch Elevator at Forest River, N. D., burned on the 8th of November, with 20,000 bushels of grain.

The warehouse of the Western Storage and Warehouse Company at Kansas City, Mo., was destroyed by fire November 18.

There was a quantity of grain belonging to the Bay City Grain Company burned at Chesaning, Mich., in the recent elevator fire at that place.

H. P. Fiseher, a wheat buyer at Allison, Minn., was robbed on the night of November 26 of \$500 while returning from Glenwood to Allison.

James Gray, an employe at the Interior Elevator at Minneapolis, Minn., injured his arm quite seriously recently while using hoisting apparatus.

The grain elevator owned by Bolton & Gates at Woodland, Mich., was burned on the night of November 27. Loss \$6,000; insurance \$2,200.

Templin & Son's grain elevator and mill at Vermont, Ind., were burned December 4, entailing a loss of \$10,000. A partial insurance was carried.

The grain elevator at Corsicana, Tex., owned by M. Drane & Sons, containing 25,000 bushels of wheat, was consumed by fire on the night of December 3.

Madill & Eliber, dealers in grain and proprietors of a general store at Uby, Mich., suffered a loss by fire recently. Loss \$8,000 to \$9,000; insurance \$4,000.

L. W. Porterfield's grain elevator at St. Joseph, Ill., was destroyed by fire on the night of December 5. The loss on building and grain is estimated at \$7,000, with \$3,000 insurance.

The loss on the elevator which burned at Voss, N. D., on November 11 was \$13,000; fully insured. The elevator was owned by the Monarch Elevator Company of Minneapolis, Minn.

The boiler in the grain elevator at East Fourteenth street near Avenue A at New York, N. Y., exploded at 1 o'clock on the afternoon of November 2. The boiler was thrown clear across the street. Three men were killed and several were injured.

Stanley & Dight's storehouse at Lucan, Ont., was burned on the night of November 2. There was stored in it 17,000 bushels of wheat, which was consumed. The fire is supposed to have been of incendiary origin. The loss was about \$10,000, partially covered by insurance.

Early on the morning of December 10 the large elevator belonging to the Farmers' Co-operative Grain Association at Sheldon, Ill., took fire and was consumed, together with several thousand bushels of oats and corn. The loss is between \$8,000 and \$10,000, with an insurance of \$5,000.

Arthur G. Nickerson, an employe in Archer & Howel's grain elevator at Centerville, S. D., met with a very painful accident recently. He was feeding corn into the sheller and in some way his hand was drawn into the cogs and the third finger on the right hand was so badly mashed that it had to be amputated.

A. Goudberg, a grain merchant of Muskegon, Mich., was lured from his residence to his store on the night of November 28 by a stranger who represented that he wanted to purchase a big bill of grain. He was found half an hour later unconscious on the store floor, with three terrible gashes in his head. He was bleeding from the mouth and ears when found, and

did not recover consciousness until the next morning. He could then give only a rambling account of the affair, and it is feared that his injuries will prove fatal. The amount of money secured by the robber was small.

A large warehouse filled with grain belonging to Mayor R. R. Stinson at Anna, Ill., collapsed on the night of November 28. The cause of the accident was a defective foundation. The building is a total wreck and the loss of grain is considerable. Fortunately there was no one in the building at the time of the accident.

The grain warehouse operated by Mr. Smith at Buffalo Rock, Ill., burned to the ground on the afternoon of November 24. The fire is supposed to have caught from the sparks of a passing locomotive. There was no grain in it at the time of the fire. The warehouse was owned by Nash, Wright & Co. of Chicago, Ill., and was valued at \$3,000.

The grain elevator owned by Leon Euziere at Tucker, Ill., caught fire in the roof November 19 from a locomotive spark and was destroyed. This is the second time within two years that the elevator has burned. It contained about 5,000 bushels of corn and oats. The loss on the grain is \$3,500, and on the building \$1,200. The grain was insured for \$2,500, and the building for \$500.

The grain elevator, operated by Harsh & Brooks at Englewood, Ill., was burned on the night of November 19. The elevator was filled with grain, baled hay, flour and feed, the entire stock being valued at \$5,000. The fire is supposed to have been caused by an incendiary. The elevator was owned by W. R. Mumford. The loss on the contents was \$3,500, on which there was an insurance of \$2,000. The loss on building and machinery was \$4,500; insurance \$2,000.

The grain elevator at Chesaning, Mich., owned by Philetus Gould, was burned on the morning of December 3, with about \$8,000 worth of property. The elevator was nearly full of cereals, comprising 12,000 bushels of oats, 600 bushels of wheat, 650 bushels of bran and a large quantity of clover and timothy seed. An adjoining building, stored with baled hay, was also burned, and two freight cars standing on the side track of the elevator. Nothing was saved. Some new improvements had recently been made in the elevator and the building was valued at \$2,500. There was no insurance. The grain was owned by Fred Gould and O. Mills. On this there was \$1,500 insurance.

Fire! Fire! Fire! That is a terrible cry. And a fire is a terrible and disastrous thing. But to men of energy a fire, even though it destroy everything, does not check their progress on a successful career. It only retards it. There is a greater calamity than fire. It is the slow corroding of one's business through a neglect of the forces by which a successful business is fostered and finally established. One of these forces, and an important one, is the reading of all appropriate literature whose tendency is directed toward one's occupation. The neglect to read such literature, if persisted in, is worse than fire. From such self-destruction there is no phoenix. There is no arising from the ashes.

Shortly after 11 o'clock on the morning of November 30 a fire broke out in the Listman mill elevator at Superior, Wis. One of the bearings of the dust collector on the second floor became heated and a small blaze was started. A workman smelled the smoke and after discovering the blaze attempted to put it out with a pail of water. There was a loud explosion, a sheet of flame darted up in the top of the cupola, but at this moment the Grinnell Automatic Sprinklers with which the plant is supplied were turned on and held the fire in check until the fire department had enough water playing on the building to extinguish the fire. There were 50,000 bushels of wheat in the elevator, but fortunately it was not damaged. The damage by fire and water is about \$4,500 to \$5,000; fully insured.

## OUR CARD BASKET

We have received calls from the following gentlemen prominently connected with the grain and elevator interests, during the month:

- W. J. Cox, DeWitt, Mo.
- J. D. White of White & Youngs, Stillman Valley, Ill.
- D. A. Robinson of Simpson & Robinson Company, Minneapolis, Minn.
- J. Silas Leas of the Barnard & Leas Manufacturing Company, Moline, Ill.
- G. L. Mead, representing The Case Manufacturing Company, Columbus, O.
- Wm. L. Scott of the Titus Grain Hulling Machinery Company at Wilmington, Del.

There is a mossback peculiarity attached to an ordinary intellect that leads it to imagine that it doesn't need to learn anything. See our guessing contest ticket.



## Latest Decisions.

### Delivering Freight to Person Other than Consignee.

The Supreme Court of Alabama recently decided that possession of a bill of lading by one other than the consignee without indorsement, does not justify the delivery of the consignment to such person. A custom on the part of a carrier or of carriers generally at a particular place to deliver goods to one other than the consignee, who merely holds the bill of lading without any indorsement, does not justify such delivery.

### Delay in Delivery—Breach of Contract.

The Supreme Court of Mississippi recently decided in the case of *Stevenson vs. Morris*, that where one enters into a contract with certain manufacturers by which the latter are to fill orders procured by him, and he is to receive a commission on such orders, he has a right of action against such manufacturers in case they do unreasonably delay to fill orders, that the purchasers refused to accept the goods, and he loses his commissions on the sales.

### Carrier—Liability—Delivery.

The Appellate Court of Indiana held, in the recent case of the *Evansville & Terre Haute Railroad Company vs. Keith, et al.*, a common carrier of goods for hire is an insurer against loss or injury from whatever cause arising, except only acts of God or the public enemy; that in order to raise this liability the goods or articles designed for transportation must be actually delivered to the carrier, and that when goods are designed for immediate transportation the placing of them in a condition to be carried at the usual place of loading and in pursuance of the usage of the parties constitutes a delivery.

### Telegram—Delivery—Damages.

The Supreme Court of Georgia held, in the recent case of the *Western Union Telegraph Company vs. Bates*, that where a plaintiff seeks to take the benefit of a written demand upon a telegraph company for damages, where such demand is necessary to his right of action, the mere fact that the agent on whom the demand was made answered it verbally by a refusal on the part of the company to settle, saying that the plaintiff would have to bring suit, will not dispense with the highest evidence of the demand, which is the writing itself, or proof of its contents after failure to produce it has been accounted for, and that where the plaintiff had made a journey which he would not have made so early had the telegraph company delivered to him with due diligence a message which ought to have been delivered before the journey was commenced, he was, *prima facie*, not entitled to recover of the company the whole expense of the journey, but only the difference, if any, between what it cost to make it then and what it would have cost to make it at the later time designated in the delayed message.

### Retention of Overcharges Amounts to Extortion.

The Interstate Commerce Commission has rendered an important decision in a case where the Texas and Pacific was accused of unjust discrimination, arising from the refusal of the defendant to deliver uncompressed cotton consigned to Phelps & Co. of New Orleans, upon the same terms as it delivers such cotton for other consignees in that city. The defendant road admitted the discrimination, but claimed to be justified by the refusal of the complainants to pay the freight charges demanded, and by subsequent refusal of the compress company to carry out its guarantee to pay freight charges demanded by the defendant in case the complainants should fail to do so. The decision follows:

The rates which carriers are required by the sixth section of the statute to publish, file, and adhere to without deviation cover not merely the carriage, but services rendered in receiving and delivering property as well.

The lien of carriers upon freight for charges earned is satisfied by the payment of rates for their services which they are lawfully entitled to demand, and a guaranty executed to a carrier by consignees or third parties, which might be construed to enable the carrier, in consideration of freight delivery before settlement of transportation charges, to exact for services rendered in moving and delivering the freight whatever it chooses to demand, cannot be used by the carrier to force payment of charges in excess of those it would be entitled to collect or receive if previous freight delivery had not been made.

The Interstate commerce act does not recognize indefinite or uncertain transportation charges. The idea of unequal compensation for like service, or discrimination in the treatment of persons similarly situated, is repugnant to every requirement of that law, and a party to an interstate shipment cannot be excluded by the carrier from privileges afforded to other patrons in the same locality because of his refusal to

pay excessive freight charges, even though an agreement to subsequently refund the excess should accompany the demand.

When actual weights of cotton shipments cannot be ascertained without great inconvenience to the shipper or carrier, and when transportation charges are promptly adjusted by the carrier upon the basis of actual weights furnished by the consignee, a practice of billing the cotton at a proper estimated weight per bale should not be deemed unlawful.

The retention of an overcharge has all the effect of extortion and unjust discrimination against the person from whom its payment has been required, and when the refund of an excessive charge has been unnecessarily delayed for a considerable period the officials responsible therefor become fairly chargeable with willful intention to violate the law.

### Debts Incurred in Option Dealing Non-Collectible.

Judge Burgess, of the Missouri Supreme Court, rendered a decision December 7 which will prove a severe blow to fictitious option dealing. Connor & Connor, grain dealing firm in St. Louis, sued to recover \$1,400 of margins put up for a customer on an oat deal of 100,000 bushels. The purchase and sale were fictitious. The court holds that such transactions come under the head of gambling debts and are unlawful and all obligations void and non-collectible. Referring to the amended anti-option law of the state the court holds that the purpose and object of the statute is to suppress the evil of dealing in futures and to limit such operations to sales made in good faith by those who wish to sell and buy, and that in making the seller responsible for the intent of the buyer and the buyer responsible for the intent of the seller. Its intention and purpose is to suppress gambling by confining the business of buying and selling for future delivery in such limits as will effectually preclude the possibility of it; that the bona fide dealer can still operate in good faith, but he cannot do so upon any terms which do not protect the community against the pernicious and ruinous speculation in the rise and fall in price.

## RICE EXPORTS AND IMPORTS.

According to the report of the Bureau of Statistics rice aggregating 1,367,600 pounds, valued at \$59,549, was imported free under reciprocity treaty with the Hawaiian Islands during October, against 1,012,100 pounds, valued at \$43,035, during October preceding; and during the ten months ending with October 4,702,400 pounds, valued at \$180,281, were imported, compared with 8,028,500 pounds, valued at \$356,453, imported during the corresponding months of the year preceding.

Of rice imported free of duty we re-exported 125 pounds, valued at \$6, during the month of October, against 90 pounds, valued at \$5, in October preceding; and during the ten months ending with October we re-exported 8,831 pounds, valued at \$354, compared with 54,579 pounds, valued at \$1,522, re-exported during the corresponding months preceding.

Dutiable rice aggregating 2,654,899 pounds, valued at \$48,911, was imported during October, against 2,446,805 pounds, valued at \$45,045, imported in October, 1892; and during the ten months ending with October 50,139,683 pounds, valued at \$835,589, were imported, compared with 71,194,183 pounds, valued at \$1,371,252, imported in October, 1892.

Of dutiable rice we re-exported 1,057,616 pounds, valued at \$19,678, during October, against 872,684 pounds, valued at \$17,421, in October preceding; and during the ten months ending with October we re-exported 9,816,928 pounds, valued at \$182,419, compared with 8,711,246 pounds, valued at \$179,226, re-exported during the corresponding months of the year preceding.

Rice flour, rice meal and broken rice amounting to 3,764,188 pounds, valued at \$60,006, was imported in October, against 6,817,752 pounds, valued at \$125,873, in October, 1892; and during the ten months ending with October 51,208,957 pounds, valued at \$847,271, were imported, compared with 54,460,979 pounds, valued at \$1,016,600, imported during the corresponding months of 1892.

Of imported rice flour, rice meal and broken rice none was re-exported in October, and none in October, 1892. There was none re-exported during the ten months ending with October, against 81,230 pounds, valued at \$1,700, exported during the corresponding months of 1892.

Only 16 days more for subscribers to try their hands at guessing for the \$50.

The total number of bushels of corn shipped from the port of New Orleans for foreign ports during the month of November, as reported by Robt. McMillan, chief inspector of the New Orleans Board of Trade, Ltd., was 123,410, against 59,450 bushels for the same month in 1892. There were 472,825 bushels of wheat shipped during November, against 1,465,446 bushels for November, 1892. Oats aggregating 22,000 bushels were shipped during the month of November, as compared with none shipped during the month of November, 1892.

## OBITUARY

G. W. Felt, a grain dealer at Superior, Neb., is dead.

Morris McDonald, a grain merchant of New Albany, Ind., died recently.

Robert C. Long, for many years a well-known grain merchant of Kansas City, Mo., died at Chicago, Ill., on the evening of November 10.

Sidney R. Francis, a member of the grain commission firm of D. R. Francis & Bro. at St. Louis, Mo., and a brother of ex-Governor Francis, died on the morning of December 3 at the age of 36 years.

Solomon S. Guthrie, a leading grain dealer on 'Change at Buffalo, N. Y., died recently at the age of 74. He had been in the grain business for about 50 years, and was at one time president of the old Board of Trade. He had represented the Merchants' Exchange in commercial meetings all over the country.

David W. Slagle, member of the Baltimore Exchange at Baltimore, Md., and of the grain and flour commission firm C. W. Slagle & Co., died recently. The immediate cause of his death was the rupture of a bloodvessel in his head during a fit of coughing. He left a very large estate to his widow who survives him.

Enos J. Ives, a well-known grain commission merchant of Chicago, Ill., died at his home in Chicago on December 2. Mr. Ives was born in the state of New York in 1833. He came to Chicago in 1866 and engaged in the commission business with his brother Almon Ives. Owing to ill-health he retired from business in 1887.

The death of William H. Deverell occurred recently at New York, N. Y. Mr. Deverell had been for many years the able representative on the Produce Exchange of the Chicago house of Schwartz, Dupee & McCormack. He made his mark as a man of great ability in his calling early in life. At the time of his death he was 46 years of age.

Wm. Henry Whitaker of Toledo, O., died very suddenly November 15 of heart disease, at the age of 62. He had been for a long time connected with the grain interests, having been associated with the late C. A. King in the grain business, and was a member first of the old Board of Trade and subsequently of the Exchange until the time of his death.

Reuben Peden of the firm of Wilkinson & Peden, grain dealers and millers at Knightstown, Ind., met with an accident recently which resulted in his instant death. He was crossing the railroad track, and misjudging the distance of an approaching train was struck by the engine and instantly killed. He was 69 years of age and had early gained and maintained throughout life an upright, sterling character.

## PERSONAL

M. S. Satterwhite has been appointed public weigher and register of grain at Louisville, Ky.

John C. Wilson, wheat grader at Fingal, N. D., and Miss Della L. Woods of Geneseo, N. D., were married on December 6.

William Schreakler, well known in grain circles at Walker, Kan., was recently married to Mrs. Wadsworth of Russell, Kan.

William Runderg, grain buyer at the Farmers' Elevator at Ong, Ill., was married to Miss Matilda Osterberg on November 29.

F. J. Doon, the active partner in the firm of Doon & Co., grain dealers at Willimantic, Conn., was married October 25 in New York City to Miss Mary T. Short of that city.

George H. McPherrin, formerly connected with the Minto Roller Mill, has accepted a position with Woodward & Co., a grain commission firm of Duluth, Minn. He is now on the road, buying wheat for this firm.

L. C. Barnett of the contracting and building firm of Barnett & Record Co. of Minneapolis, Minn., was married on November 16 to Miss Laura Tomblor of Minneapolis. Immediately following the wedding ceremony the bridal couple departed on their wedding journey.

Fully three-fourths or more of the hay received in Chicago is consigned to be sold for account of the shipper at whatever the market may be at the time of its arrival. It looks like this was bordering on the line of speculation.—*Hay There.*



## WATERWAYS

Navigation closed on the St. Lawrence River on November 21.

The Erie, Champlain, Black River, Oswego and Cayuga and Seneca Canals were closed on Nov. 30, 1893.

Wheat has been taken by a couple of the boats at Duluth, Minn., for storage and spring delivery, at 4½ cents a bushel.

A test of electricity as a motive power for canal boats was made at Brighton, N. Y., recently, and proved a success.

There has been almost no complaint at Buffalo late this fall about grain shortages, as the cargoes from all ports have held out unusually close.

The last stone of the masonry of the new "Soo" lock was laid on November 10. The lock is expected to be ready for business by the middle of 1894.

A conference of canal men was called for December 5 in New York City, under the auspices of the union, in order to take measures for the improvement of the canals.

The Manchester Ship Canal is now entirely completed, and water has been admitted to its entire length. The formal opening of the canal will take place January 1.

There was a loss of 123 lives on the Great Lakes in 1893. There was a total loss of 53 vessels with aggregate tonnage of 24,258, and valued at \$1,040,400. Partial losses by stranding, collisions and fire make the total losses amount to \$2,112,588.

There is a greater number of vessels lying up at the head of the lakes this winter than ever before. The majority are whalebacks, but the increased facilities for getting overhauled and for cargoes in the spring has its effect on the general fleet.

The receipts of grain at New York by canal for six months, May to October, inclusive, were 36,775,000 bushels, against 21,291,000 bushels for the same period of the preceding year. The receipts of grain during the past season were larger than last year, or for ten years past.

The report of the Collector of Canal Statistics at Buffalo, N. Y., gives the number of bushels of flaxseed shipped by canal during the season of 1893 at 3,300,912, making the total of grain and seeds as follows: Grain 48,042,714 bushels, seeds 3,300,912 bushels. Total 51,343,626 bushels.

President Bellman of the Toledo Exchange at Toledo, O., in company with Congressman Ritchie and Colonel Smith, who have charge of the Western Lake Erie government improvements, went on an inspection trip recently on Maumee Bay and river. It is estimated that \$300,000 will be required for next year's harbor work.

The propeller Tilley, loaded with grain from Fort William to Kingston, went ashore at Nine Mile Point, Lake Ontario, on November 29. After lightening about 8,000 bushels onto a tug and floating elevator which came to her assistance the Tilley came off and arrived at Kingston the same day without much damage to vessel or cargo.

The construction of the proposed canal to connect Lakes St. Clair and Erie through Canadian territory together with the completion of the Sault Ste. Marie Canal on the Canadian side will furnish a continuous waterway for Canada from the great lakes to the ocean independent of any waterways under control of the United States except by the Erie Canal.

Secretary of the Treasury Carlisle has submitted to Congress the usual estimates for rivers and harbors, and the amounts required for the maintenance and improvement of aids to navigation, in the form of lighthouses and fog signals, for the year ending June 30, 1895. The amounts appropriated will be available June 30, 1894. A very large sum will be necessary to carry out all the improvements.

Over 546 boats were loaded with wheat and coarse grains for shipment at the head of Lake Superior during the season just closed, and the average cargo of each was 62,887 bushels, making the total shipments for the year 34,336,214 bushels. The total shipments this year in round numbers were 13,000,000 more than last year. The shipments of grain by lake in the season of 1892 were 20,998,826 bushels.

A tonnage tax is now collected under the provisions of the act of June 19, 1886, which requires that a tax of three cents a ton, not to exceed 15 cents a ton in any one year, shall be imposed at each entry of every vessel at a United States port from any port in North America, Central America, the West India Islands, Bahama Islands, the Bermuda Islands, the coast of South America, bordering on the Caribbean Sea, the Sandwich Islands or Newfoundland; and a

duty of six cents a ton, not to exceed 30 cents per ton per annum, at each entry of every vessel at any port of the United States from all other foreign ports.

When the Merida's big load of flax and barley of 138,000 bushels was weighed out in Buffalo recently the load was over 1,500 bushels short. Investigation showed the load to have been taken on at "M" elevator at Superior, Wis., the same house from which the Palmer had run out an overage of barley of 1,500 bushels a few days previous. How this shortage may have occurred it is not difficult to see.

The steamer Waldo A. Avery, loaded with grain en route from Chicago to Buffalo, N. Y., burned in the Straits on the night of December 5. The burning boat was beached at McGulpins Point, five miles west of Mackinaw City, Mich. Both steamer and cargo were totally destroyed. The burned boat was owned by Hawgood & Avery of Bay City, and was valued at \$80,000. Her cargo consisted of 70,000 bushels of corn, which was to be held on board for winter storage at Buffalo.

Of the total tonnage which passed through the Sault Ste. Marie Canal during the year 1892, only 3.8 per cent. was Canadian, the remaining 96.2 per cent. being American. The enormous preponderance of American tonnage on the lake is due to the fact that our navigation laws confine the coastwise or domestic commerce of the United States to American vessels and that the commerce between American ports on the lakes comprises about 95 per cent. of the entire lake commerce.

The ship J. B. Thomas on December 1 took on a load of wheat at Tacoma, Wash., for export to Europe. There is now more wheat at the Western ports than can be exported during the balance of the season, even should all the tonnage in sight arrive in time to carry it off. Freight rates are down to cost or below. Wheat is lower than ever before known, yet it is impossible to profitably export it, and with a small amount of desirable spot tonnage, an exodus of ships commenced on December 1 leaving those ports for more desirable markets.

The season on the Erie Canal practically closed with the week ending November 18. After that time boats only took loads in case of fair weather. The present season has been a very satisfactory one to canal boatmen, as they have all made money, their boats earning from 50 to 75 per cent. of their value. These large earnings were due to the action of the railroads between Buffalo and the seaboard points maintaining high rail rates on grain throughout the season. This enabled the canal to get fair freights. By next season the capacity of the canal will be greatly enlarged, and the number of boats will also be increased.

It is estimated that there are untold-of possibilities of future greatness for Chicago, Ill., with a ship canal which can be built from the south end of Lake Michigan to the west end of Lake Erie at Toledo. Such a canal would place Chicago 550 miles nearer the Atlantic, and the saving in freight charges alone, as shown by transportation statistics, would pay 5 per cent. on an investment of \$50,000,000, a sum sufficient to construct a ship canal from Chicago to Toledo, a distance of 140 miles. The saving of time, interest and insurance, together with the saving of wreckage and loss consequent upon a voyage through the three stormy lakes, would also make an aggregate of savings sufficient to render the cost of such a canal a profitable investment.

The records of the Bureau of Navigation show that during the last fiscal year 956 new vessels have been documented, whose aggregate tonnage is 211,639.35 tons. Of these, 175 vessels, representing a tonnage of 99,271.24, were built upon the Great Lakes. Thirty-five of these, measuring 62,825.22 tons, were of iron or steel, also built upon the Great Lakes. The iron or steel tonnage built in the United States elsewhere than on the Great Lakes embraced 30 vessels, aggregating 31,706.82 tons. Four hundred and ninety-three sailing vessels, measuring 49,348 tons, and 380 steam vessels, measuring 134,367 tons, were built and documented during the last fiscal year; also 28 canal boats, measuring 3,791 tons, and 55 barges, measuring 24,132 tons.

J. G. Rose of the vessel firm of Rose & Lazier, an old Canadian, said: "I don't expect the time to come when the dream of the enthusiast who looks for direct business in shipping between the head of the lakes and Europe will be realized. But if we can ship cargoes direct to tidewater at the lower St. Lawrence, where they can be transferred to ocean vessels lying alongside, we shall have a business that can't be believed now. Canada has a magnificent system of canals to tidewater and is constantly improving it, so that in a very few years lake vessels can reach the ocean. I do not think the time will ever come when a ship can be built that will be equally successful in lake and ocean service. There are now barges carrying 40,000 bushels of grain from Lake Ontario to Montreal on six feet draft at 2½ cents a bushel. Give ten feet of water, which is soon to come, and they will carry 80,000 or more bushels and at half the freight charge. In the past Duluth has been a grain center only in wheat. We are now cutting into Milwaukee

in the barley trade. In flaxseed, too, a very large business is getting started. The Northwest grows the finest barley in the world, and we will soon supply the brewers of the East. Duluth barley, flax and corn traffic should soon surpass the wheat trade in value."

An investigation has been made as to the feasibility of using a trolley line for operating small boats through the Black Cañon and other scenic points in Colorado. The power is to be generated by water wheels driven by the current of the river. One of the features of the scheme is to convey the surplus portion of the power down the river, where it will be used for pumping the water of the river to a height of from 15 to 20 feet upon mesa lands for irrigation.

## DESTINATION OF WHEAT EXPORTS.

According to the last report of the Bureau of Statistics, wheat aggregating 6,929,312 bushels, valued at \$4,740,914, was exported during October, against 12,740,199 bushels, valued at \$10,153,821, exported during October preceding; and during the ten months ending with October, 96,094,614 bushels, valued at \$71,604,852, were exported, compared with 104,206,311 bushels, valued at \$95,909,752, exported during the corresponding months preceding.

The United Kingdom received 5,000,088 bushels, valued at \$3,344,854, in October, against 9,254,840 bushels, valued at \$7,360,677, in October preceding; and during the ten months ending with October, 52,491,366 bushels, valued at \$39,043,201, were exported, compared with 57,677,889 bushels, valued at \$51,981,683, for the corresponding months preceding. To Germany the exports amounted to 154,590 bushels, valued at \$115,251, during October, against 116,623 bushels, valued at \$89,135, in October, 1892; and during the ten months ending with October, 2,316,500 bushels, valued at \$1,737,992, were exported, compared with 5,569,399 bushels, valued at \$5,273,831, exported during the corresponding months of 1892.

To France we exported 298,174 bushels, valued at \$203,634, in October, against 471,598 bushels, valued at \$403,754, in October, 1892; and during the ten months ending with October, 9,905,019 bushels, valued at \$7,375,645, were exported, compared with 12,560,484 bushels, valued at \$12,520,892, during the same months of 1892. Other countries in Europe received 1,427,734 bushels, valued at \$1,041,618, in October, against 2,777,518 bushels, valued at \$1,849,263, in October preceding; and during the ten months ending with October, 25,444,806 bushels, valued at \$19,322,025, were exported, compared with 23,652,741 bushels, valued at \$22,251,003, exported during the corresponding months of the year preceding.

We exported to the British North American Possessions 26,952 bushels, valued at \$18,086, in October, against 593,564 bushels, valued at \$427,120, in October preceding; and during the ten months ending with October we exported 5,477,576 bushels, valued at \$3,767,515, compared with 4,596,802 bushels, valued at \$3,733,279, for the corresponding months preceding.

We exported to Central American States and British Honduras 333 bushels, valued at \$240, during October, against 7,793 bushels, valued at \$6,775, in October, 1892; and during the ten months ending with October the exports amounted to 34,666 bushels, valued at \$28,432, against 52,029 bushels, valued at \$50,640, for the corresponding months of 1892. There was no wheat exported to the West Indies and Bermuda during October and none in October, 1892; during the ten months ending with October, 13,058 bushels, valued at \$10,733, were exported, compared with 5,822 bushels, valued at \$5,817, exported during the corresponding months of 1892. Brazil received from us 22 bushels, valued at \$25, during October, against 15,992 bushels, valued at \$15,000, in October, 1892; and during the ten months ending with October Brazil received 16,048 bushels, valued at \$13,654, compared with 67,543 bushels, valued at \$68,847, for the same months of 1892. To other countries in South America we exported 500 bushels, valued at \$440, during October, against 1,360 bushels, valued at \$1,349, in October preceding; and during the ten months ending with October they received 5,828 bushels, valued at \$5,523, compared with 7,257 bushels, valued at \$7,719, for the corresponding months preceding.

To Asia and Oceania 1,235 bushels, valued at \$838, were exported in October, against 911 bushels, valued at \$748, in October preceding; and during the ten months ending with October, 10,263 bushels, valued at \$8,041, were exported, compared with 14,387 bushels, valued at \$13,286, exported during the same months preceding.

We exported to Africa 19,309 bushels, valued at \$15,550, in October, and none in October, 1892; and during the ten months ending with October we exported 372,586 bushels, valued at \$286,636, compared with 408 bushels, valued at \$443, for the corresponding months of 1892. We exported to other countries in Europe 375 bushels, valued at \$378, in October, and none in October, 1892; and during the ten months ending with October we exported 6,898 bushels, valued at \$5,455, compared with 1,550 bushels, valued at \$1,412, exported during the corresponding months of 1892.



## CROP : CONDITIONS.

**GOVERNMENT CROP REPORT.**—The Department of Agriculture issues the following crop report: Wheat, average, 52.1; winter wheat, average, 91.5; corn, average, 37. The conditions of winter wheat on the first day of December averaged 91.5, against 87.4 last year; in the Middle and Southern states it ranges from 75 to 99. In the principal winter wheat states the condition is as follows: Michigan, 89; Ohio, 92; Indiana, 90; Illinois, 88; Missouri, 82; Kansas, 89; California, 100. The condition of winter rye as reported is 94.6, as against 89.1 last year.

**MICHIGAN.**—The crop report for December, with rare exceptions, shows that while wheat has made small growth, the plant, December 1, was in fairly healthy condition. The small growth is due to late sowing and dry weather. The presence of insects is noted by a few correspondents, but the injury done by them, if any, is hardly perceptible. The ground has been well covered with snow since December. The total number of bushels of wheat reported marketed in November is 1,704,351. The number of bushels reported marketed in the four months, August–November, is 6,358,371, which is 378,825 bushels less than reported marketed in the same months last year. Pasture this fall has not been good, particularly in the southern counties, and the condition of live stock is reported from five to seven points below a full average. Stock is practically free from disease of any kind.

**WINTER WHEAT IN ILLINOIS.**—According to the reports made to the Illinois Department of Agriculture December 1, on the area and condition of winter wheat, there is a decrease in the area seeded to this cereal last fall, as compared with 1892, of 10 per cent. In the northern division of the state, where 82,186 acres were seeded last year, there is a deficiency of 27 per cent., or 22,298 acres; in the central division the deficiency is 15 per cent., or 141,932 acres, making the area seeded 790,441 acres. In the greatest wheat-growing division of the state, the southern, the decrease is but 4 per cent., and the area seeded is 971,085 acres. The total area seeded last fall was 2,029,000 acres. The deficiency in area is attributed to two causes, one the low price which has ruled during the last few months, and the other the dry season, which rendered it difficult to prepare the ground properly for seeding. The condition of the crop December 1 was not so favorable as was to be desired. The lack of moisture in the ground made the seed slow in germinating and its growth was also retarded from this cause, so that as a rule the plant is small and not strong and therefore not in first-class condition to go into winter quarters. A full seasonable condition of wheat is reported in the counties of Cook, De Kalb, Kankakee, Lee, McHenry, Stark, Whiteside, Brown, Edgar, Logan, Vermilion, Edwards, Johnson, Monroe, Perry, Pulaski, Saline and Union. In the following counties Hessian fly is reported to be working in the wheat, viz.: Wabash, Wayne, White, Madison, Richland, Johnson, Clinton, Edwards and Christian. In Jasper County the wheat is injured by a worm at the root, which cuts off the outside blade below the surface and causes the plant to turn red. The December 1 condition of the crop is 87 per cent. of an average in the northern division of the state, 81 per cent. in the central and 89 per cent. in the southern division.

**IOWA.**—The final report of Director J. R. Sage of the Iowa Weather and Crop Bureau places the total value of crops of the state, exclusive of the products of the orchards, gardens and vineyards, at \$161,097,032. The returns are unusually accurate, as the crop acreage was in all cases determined by a census taken by the assessors in connection with their regular work. The report, in so far as it relates to the important crops, is as follows: Corn—The average yield of this leading crop of the state is shown by the reports by over 700 correspondents to be 35.7 bushels per acre. This is about three bushels per acre above the average of the past fifteen years. The number of acres planted this year in Iowa, as shown by the reports of the assessors and correspondents, was 6,016,940, indicating a total yield of 214,804,758 bushels, which is over 10,000,000 in excess of last year's product. The average market price December 1 was 25 cents a bushel. Winter wheat—The area of winter wheat harvested this year was 233,553 acres; the average yield was 15.8 bushels per acre, giving a total product of 3,690,137 bushels. Spring wheat—Average, 12.4 bushels per acre; acres harvested, 620,626; product, 7,695,762 bushels; total winter and spring wheat yield, 11,385,899 bushels; average price, 49 cents. Oats—Acreage harvested, 4,197,623; average yield, 24 bushels per acre; total product, 100,742,852 bushels; average price, 22 cents. Rye—Average per acre, 16.3 bushels; area harvested, 109,528 acres; total product, 1,785,202 bushels; average price, 35 cents. Barley—Average per acre, 22.8; number of acres, 506,091; total product, 11,437,666 bushels; average price, 32 cents. Irish potatoes—Average per acre, 59.2; acres planted, 104,261; total product, 6,172,257 bushels; average price, 66 cents. Timothy seed—Average yield, 4 bushels; acreage, 164,104 acres; total product, 656,416 bushels; average price, \$1.40. Clover seed—Average

yield, 2 bushels per acre; total area, 54,538; product, 109,076 bushels; average price, \$5.48. Hay—Average yield, 1.7 tons per acre; acreage, exclusive of prairie hay, 2,687,858 acres; total product, 4,569,341 tons; average price, \$5.22 per ton. Prairie hay—Estimated average yield per acre, 1.1 tons; acres cut, 2,009,403; total product, 2,813,161 tons; average price, \$3 per ton. Old corn and oats—The average amount of old corn crop of 1892 in farmers' hands is 4 per cent., approximately 6,000,000 bushels. The average amount of last year's oats on hand is also about 4 per cent.

**CORN IN ILLINOIS.**—The State Board of Agriculture has issued a bulletin from reports on the corn crop of the state made up to December 1. The area planted last spring, 6,116,188 acres, was 1,228,056 acres larger than the area reported in 1892, the largest area being in the northern division of the state. Notwithstanding the adverse circumstances attending the planting, cultivation and growth of corn during the season, the average yield per acre of 26 bushels is as large as last year, and, with the increased area, makes the total yield nearly 32,500,000 bushels larger than in 1892, when the yield was 137,510,285 bushels. The total corn crop of the state for 1893 amounts to 169,016,371 bushels. In the northern division the yield was 26 bushels per acre, in the central 27, and in the southern 22 bushels. The quality of corn is very good and is 91 per cent. of an average. The best corn is in Northern Illinois, where it lacks but two points of being of average quality. Damage to the crop by grasshoppers and army worm is reported from the counties of St. Clair, La Salle, Fayette and Coles. Chinch bugs worked on the corn in several counties. Although the price per bushel of 30 cents is rather below the average, the total value of the corn crop of 1893 is \$51,538,070.

## ITEMS FROM ABROAD

At a French seed fair held recently where in ordinary seasons thousands of bags of red clover changed hands scarcely a bag was offered. This confirms the opinion that the French crop is one of the shortest on record.

Japan is reported as having produced an annual average of 14,900,000 bushels of wheat during the ten years ending with 1892; 24,700,000 bushels of rye, 34,000,000 bushels of barley, 173,000,000 bushels of rice—the latter being the chief food cereal.

The Bordeaux Society of Political Economy at Bordeaux, France, has decided to ask the French Government to open negotiations with the American Government with a view to concluding a treaty of commerce between the two countries, and to check the disastrous tariff war. The point of interest is the reduction of the French duty on grain and flour.

The wheat crop of Russia is estimated to be 9,790,000 quarters more than last year; the rye crop, 14,800,000 quarters more; the oats crop, 25,000,000 quarters more, and the barley crop, 5,760,000 more than in 1892. These four crops therefore present a total of over 55,000,000 quarters more produced than last year, which is equal to 33 per cent. on last year's production.

The wheat crop of the United Kingdom, as estimated by the Board of Agriculture during the past three seasons, 1890–91–92, averaged 8,800,000 quarters, the net imports (after deducting 200,000 or 300,000 quarters exports) averaged 21,780,000 quarters. (In this estimate flour is reckoned at 70 per cent. of wheat.) The supplies of the three years therefore averaged 30,500,000 quarters. After deducting 2½ bushels per acre for seeding 2,300,000 acres, say 650,000 quarters, the balance available for consumption is 29,850,000 quarters per annum.

Next to the United States, Russia is the greatest grain producing country in the world. Its rye product is greater by far than that of any other nation, and furnishes half the food for the armies of continental Europe. The Russian wheat crop is about half that of the United States, but it is nearly all exported, the coarser grains forming the principal food of the people. Twice as much barley is raised in Russia as is raised in the United States; the oat crops are about the same in the two countries; Russia raised but one-hundredth part as much Indian corn as the United States raise. The total grain harvests of the two countries are 1,800,000,000 bushels for Russia and 2,900,000,000 bushels for the United States.

A considerable amount of hay has been sold for cash in Stockton, Cal., during the last few months. It is thought the amount purchased is not much less than 2,000 tons, and it sold for something like \$20,000. The largest purchases were made by the purchasing agent of the Southern Pacific, G. A. Loring, who bought more than 1,000 tons of hay, most of it at \$10 per ton in cash.



The Chicago Board of Trade directors have decided to have a delivery on Saturday from 12:15 to 12:45 o'clock.

Work on the remodeling and improvement of the Merchants' Exchange building at St. Louis, Mo., will be commenced at once. Bids for the work have been accepted by the directory.

The delegates from the Chicago Board of Trade to the session of the National Board of Trade at Washington in January are Messrs. W. T. Baker, W. J. Pope, W. S. Seaverns, L. W. Bodman, F. G. Logan, G. Montague, M. Cudahy, T. A. Wright, H. F. Dousman, R. S. Lyon and George F. Stone.

Option trading on the Local Board at Montreal, Que., will commence as soon as an opportune time arrives for its start. There is some doubt among those who have taken an active part in its proposed establishment as to the wisdom of inaugurating it at a time when wheat is at such an abnormally low price as it is now selling at. That it will be established seems beyond any manner of doubt.

At a recent meeting of all interested in the Superior Board of Trade at Superior, Wis., J. J. Atkinson was elected secretary of the board in place of H. A. George, resigned. L. H. Page was elected director in place of Alexander W. Stowe, and A. Ruyter in place of Frank G. Peters, deceased. A committee was appointed to solicit memberships and subscriptions. An assessment of \$2 per month was levied on members for current expenses and a rule was adopted to suspend directors who do not attend meetings.

The Superior Board of Trade have been directing their efforts toward securing concessions from the railroads, which, if granted, would assist in building up a sample market. They wish the railroads to agree to allow ears of wheat to remain in their yards 24 hours after arrival before being sent to the elevators. This would give interested parties an opportunity to sample the grain and make sales on sample. A committee was appointed to call upon J. J. Hill of the Great Northern road and present the matter.

The Duluth Board of Trade has discontinued making a report on the number of cars of grain "on track" each morning, but will take instead the reports as furnished from the offices of the state grain inspector. The Board has always found it difficult to secure reports from the various railroads as to the number of cars each has "on track," hence its action. As soon as arrangements can be made to get reports from the railroads that are reliable the Board will continue making the former report.

President Hamill of the Chicago Board of Trade at Chicago, Ill., has appointed a committee of five to examine into the features of the proposed change in the system of clearing trades as advanced by Robert Lindblom. The plan has in view the doing away with rings and substitutes and leaves every contract intact until canceled by actual delivery or offset at the maturity of the contracts. The committee appointed consisted of Cyrus H. Adams, George D. Rumsey, Charles B. Condon, John C. Hatley and George R. Nichols. It was the intention to search most closely for the merits and demerits of the scheme so that the report of the committee was not expected for some time.

Another good reason why the Merchants' Exchange should have a clearing house for the settlement of grain contracts that would allow the middlemen—those who have it both bought and sold—to ring out their contracts, receive their profits or pay their losses and thus get out of the deal, was illustrated on 'Change to-day. A single contract for 5,000 bushels November corn was outstanding and to-day was the last day for its settlement. It had originally been sold by the Phil Brockmann Commission Company to the Miller Grain and Elevator Company at 37½ cents, but in the course of trading four other firms got in between contracts and were all interested in this 5,000-bushel lot. November corn, or rather cash No. 2 corn, has been down as low as 33 cents since this November contract in dispute was made, but when the last business day of the month arrived no delivery had been tendered, and the contract was still open. Wm. Leftwich, for the Miller Grain and Elevator Company, stood out to-day for an actual delivery or a settlement at 36 cents, but as the cash market was around 34 cents the shorts were not willing to accept these terms. They did, however, finally come to Mr. Leftwich's terms and the contract was settled out. The amount involved in this was not large, but the trouble and annoyance involved caused those interested to speak openly in favor of a clearing house, which would have made such a complication impossible. It was stated that 20,000 bushels November corn bought at 39½ cents was not settled at all, the party who had it bought demanded the actual delivery, but the corn was not obtainable, and the contracts for this lot were defaulted upon.—*St. Louis (Mo.) Post Dispatch.*



## THE MARKETS.

We will be pleased to publish under this head short reviews of the conditions ruling in the different markets. Copy must reach us by the morning of the 14th of each month.

**HAY AT LOUISVILLE.**—Callahan & Sons report the following as the condition of the market at Louisville, Ky., for the week ending December 9: Receipts of hay have been light during the week, and we think a slight advance in price is noticeable. There exists more demand for first-class timothy hay than for several weeks past, and the receipts are hardly sufficient to supply it. No. 1 timothy rules at \$12.00@13.00; No. 2 timothy at \$11.00@11.50; mixed hay at \$10.00@11.00; wheat straw at \$4.50@5.00.

**HAY AT CHICAGO.**—M. M. Freeman & Co. report receipts of hay on December 12 at 1,358 tons, shipments at 196 tons. The receipts of timothy were moderate and market steady and unchanged. No. 1 ranged at \$10.50@11.00; No. 2 at \$9.50@10.50; mixed at \$8.50@9.00. The market for prairie was quiet but steady. Arrivals were quite liberal. Choice Iowa Upland ranged at \$8.25@8.50; good Iowa Upland at \$7.75@8.00; good feeding hay at \$6.50@7.50. Straw was firm and in demand, all good straw finding ready sale. Rye straw ranged at \$8.00@8.25; wheat and oat at \$6.00. No changes in the market are looked for, and indications are favorable that present values will be maintained.

**NEW ORLEANS MARKETS.**—J. & M. Schwabacher, Ltd., report the following as the condition of the market at New Orleans, La., on December 11: **TIMOTHY HAY.**—Stocks at depots and in dealers hands are now very small, and with light receipts, prices have advanced some. An active movement at full prices is anticipated. We quote to-day choice timothy \$17.00, strictly prime \$16.00 to \$16.50; good prime \$15.50, prime \$14.50 to \$15.00 per ton. **PRAIRIE HAY** is wanted, and choice stock would sell readily at \$9.50 per ton. **CORN** is steady and in fair demand at quotations, viz.: No. 2 yellow 47 cents, mixed 46 cents, white 46 cents per bushel sacked. **OATS** are in very good demand for the high grades. Quote choice black mixed 37½ cents; No. 2 white 38 cents per bushel; No. 2 black mixed 36½@37 cents; No. 3 35½; No. 3 white 37 cents per bushel. **WHEAT BRAN** is quiet at \$0@82½ cents per 100 pounds.

**BARLEY AT CHICAGO.**—H. Mueller & Co. report the receipts of barley during November as comparatively light, and prices kept remarkably steady, especially on the medium and low grades. The latter are taken by feed dealers and shippers and malsters. All want something cheap so the medium grades are in good demand. Good to choice barley is 2 to 3 cents lower than a month ago, but as offerings of such are small there is no pressure to sell. Receipts have lately increased, but demand was also better and prices unchanged. We quote feeding grades at 35@38 cents; common malting of light weight 38@40 cents; fair weight at 41@43 cents; medium grade 43@47 cents; good at 48@50 cents; choice 50@54 cents. The outside price is for extra good. The Eastern demand is slow as yet, and the proposed tariff reduction on barley is already creating a feeling of uneasiness, and in all probability barley will sell still lower, especially if we should get larger receipts.

**HAY AT NEW YORK.**—Theo. P. Huffman & Co. report the following as the condition of the hay market on December 9: It will not be strange if the call for hay between Christmas and New Years is slow. It usually is, as at that time dealers are taking inventories and settling up for the year. Anything that can be moved to arrive here before Christmas, however, we think will strike a better market than until sometime after the 1st of January. Canal Boats and Hudson River barges have all stopped running, and on that account it is reasonable to expect that a stronger market will prevail, with the exception of the end of the year as mentioned above. Arrivals into the market over all railroads this week have been 604 cars compared with 630 the previous week. Our quotations are as follows: Prime, large bales, 85c., perpetual bales 80c.; No. 1, large bales, 80c., perpetual bales 75c.; No. 2, large bales, 75c., perpetual bales 70c.; No. 3, large bales, 60@65c., perpetual bales 60@65c.; clover mixed, large bales, 65c., perpetual bales 60@65c.; clover, large bales, 50@60c., perpetual bales 55@60c. Straw, prime rye 55@60c.; oat 42@45c.

**WEEKLY GRAIN REPORT OF L. NORMAN & CO., LTD.,** London, Eng., November 27.—Since the 20th inst., the wheat trade has exhibited a steadier feeling partly owing to colder weather here and firmer markets in America. Buyers, however, are still slow in operating, and only the cheap Russian wheats meet with any attention. American shippers show firmness, and hold their wheat at values above our buyers' ideas, consequently business is of an insignificant nature, and restricted to a few parcel transactions. **CANADIAN GRAIN** is neglected, shippers values being too high to admit of business. **HARD MAXIMOBAS** are firmly held, but quiet. A parcel of No. 1 last half December, January shipment sold at 27d c. i. f. London, and to-day 6d 10½ has been taken for a parcel on passage. For shipment 27s 3d c. i. f. is asked with few buyers at 27s c. i. f. London. **HARD DRLUTH.**—Shippers are firm, but no buyers. Sellers quote to-day 27s 6d for No. 1 on passage, and same price would be accepted for forward shipment. The scarcity of maize on spot keeps price up. Mixed American fetches 21s per quarter ex ship. Quotations for parcels for shipment have given way. Transactions have been effected during the week at 19s 4½d, and 19s 3d c. i. f. London has been accepted to-day. **BARLEY.**—English malting is slow to sell owing to large offers of ordinary sorts which in many cases have sold at a decline. Finer sorts continue in favor. **OATS.**—Easy. Mixed American are scarce and held too high. Canadians apparently not offering. **PEAS.**—Quiet and lower to sell. To London sellers ask 25s c. i. f., but no buyers. Liverpool stocks heavy. Glasgow shows no change. **HAY.**—Canadian, with quiet trade, has ruled easier. Business has been transacted to-day at £5.5.0 c. i. f. London. To Liverpool sellers ask £4 16s 3d with buyers at £4 12s 6d. To Bristol sellers at £5 3s 9d with buyers at £5 1s 3d to £5 2s 6d.

**CINCINNATI MARKETS.**—Collins & Co. report the following as the condition of the market at Cincinnati, O., for week ending December 9: Our market during the past week has ruled more steady on nearly all kinds of grain attributable to a somewhat better demand than has ruled for sometime past. The receipts continue rather small, but with a slight indication of a little loosening up in the movement of grain to market. The improved demand creates a steadier, and with it a degree of confidence gradually assuming control. A feeling that values cannot much longer be depressed, and promises in the near future much more active markets. **WHEAT.**—The

offerings are light, and with a fair demand prices are ruling steady. No. 3 red at 56@57 cents. **CORN.**—Light receipts have ruled during the past week, and with it a fair demand. The market, while quotably a little higher, is developing an undercurrent of considerable more strength. The effects of the recent drouth tributary to this market impairing both quality and yield, is very apparent in the present arrivals of the new crop, and we anticipate soon an enlargement in the demand. **OATS.**—Arrivals are small, and the offerings are firmly held at quotations. No. 3 white at 32 to 32½ cents; No. 3 mixed at 31½ cents. **EAR-CORN.**—Receipts of sound, clean stock for feeding purposes are not equal to the current wants of the trade, and we advise prompt shipments. White ear at 38@40 cents as to quality. **RYE.**—Choice stock is scarce and such is in fair request. **HAY.**—A scarcity of the arrivals of choice and No. 1 grades continue. The limited offerings of these grades are not equal to the inquiry of the local feeding trade, causing values to rule very firm, but the demand is limited, and larger offerings would cause an easier feeling. The grades below No. 1 are still weak and dull at uncertain values. **MILL FEED.**—The market rules firm under moderate supplies.



## AMATEUR STATISTICIANS BUSY.

The amateur statisticians North and South are as busy as the "devil in a gale of wind," in statements of how much surplus wheat there is in the country for export. It is easy enough for anyone to determine that question by his own figures, which disagree with every other man's, and what is the result? What is the good of it but confusion?—*Toledo Market Report.*

## ELECTRICAL TRACTION ON THE ERIE.

The experiments made with electrical traction on the Erie Canal were fairly successful, and may be considered as settling the question of the practicability of working canal boats on the trolley system. Considering that the arrangements were necessarily of a temporary nature, the working of the motors and the apparatus for transmitting power was good. Nobody has seriously doubted, however, the possibility of applying electrical traction in this way. The true test of the system and the proof of its commercial value can only be made by the equipment of a considerable section of the canal so that boats can be operated regularly throughout the season.—*Engineering Journal.*

## THE LARGE VISIBLE TO BLAME.

Wheat is low and there are good reasons why it is so. Before it goes higher, and stays there, the causes that put it down must be removed or some indications that they will eventually be removed must appear. The latter would little effect in the long run, unless it were of sufficient merit to attract and hold the attention of wheat and flour buyers throughout the world. The large supply, as all know who are posted on the wheat situation, is the great pressure which has forced prices where they are now. Its removal, or the possibility of its being greatly reduced, is the one thing necessary to start an upward movement that would have signs of lasting strength.—*Market Record.*

## PROFITABLE WHEAT GROWING IN ENGLAND.

Quite an interesting discussion has for some weeks past been going on in regard to the question of wheat growing in England—does it pay? Many farmers have written down their experiences, and the result is very contradictory, several of them showing chapter and verse to the effect that at 27 to 28 per quarter wheat growing results in a dead loss, and others proving by their figures that a profit, not large it is true, is to be made at this price. This is quite to be expected, since there are some favored spots where wheat at 27 to 28 does not result in loss; but those localities where such a price does not pay must be in the majority, or otherwise we should not hear of the thousands of acres in Nottinghamshire, Yorkshire, Essex and Lincolnshire, which are to be had practically rent free.—*Miller's Gazette, London.*

## EVERY BALE SHOULD BE WEIGHED.

Regarding the articles on shortages in hay shipped to London, one of the principals of a large London firm informed the writer a few days ago that there were tricks perpetrated on this side as well as in London, and he referred to instances which had come under his notice of heavy shortages in car lots of hay received at this port from interior points, which had been transferred to steamers without all the bales being reweighed. He says the practice of only weighing a few bales of each lot before it goes on board vessel is not sufficient, but that the weight of every bale should be tested. There is certainly a good deal of logic in this: for if it be necessary to test some bales, why not all? The excessive shortages that have occurred in London, however, over and above the decrease in weight at other British ports is still a fact that is not explained by the above statements, as precisely the same method of testing weights before the

hay is put on board vessel is observed in shipments to other ports as well as London.—*Trade Bulletin, Montreal.*

## THE SHIPPER'S DUTY.

This is a large country and the shipper owes it to himself and his farmer friends to familiarize himself with the requirements of every section of the country, the prices prevailing at the market centers of these points, the cost of handling at such places and the rate of freight from his shipping stations to these various sections. By doing this every shipper knows that no competitor has any better market than he has.—*Hay There.*

## GRADING HAY.

A general movement seems to be on foot among dealers in hay to promote some national system of grading. At present there is so much difference in the quality of hay representing any special grade, in the several states, that it is impossible to arrive at a just conclusion as to the relative prices in the various markets. The dealer would be protected from being charged with fraud, either by the farmer or the other dealer to whom he ships. It is the true way to regulate values, so as to place all parties beyond suspicion; and we hope to see those interested in the hay trade bring about a system of inspection which will accomplish the results aimed at. It will also do much to encourage farmers to improve the quality of their products, because they will realize that a good article will sell on its merits and to their pecuniary advantage.—*Michigan Farmer.*

## CANADIAN BARLEY AND THE TARIFF.

It has been admitted generally that the exorbitant duty of 30 cents per bushel on barley going into the States, which was virtually prohibitive, was a great blow to Ontario farmers, who were thus cut off from the main source of demand for one of their principal cereals; and to this cause was attributed a considerable portion of the depression which subsequently settled down upon the farming interests of Ontario. Should, therefore, the American duty on barley be reduced as proposed, from 30 cents per bushel to an ad valorem duty of 20 per cent., it would mean a reduction of about 20 cents per bushel on the basis of present values. With 20 cents per bushel off the present tariff, however, a good margin can be allowed for division of profits between American buyers and Canadian farmers and middlemen. In case the proposed reduction in the duty on barley is ratified by Congress it will mean an increase in our exports of about \$4,000,000 per year.—*Trade Bulletin, Montreal.*

## FARM PRICES.

The statistical returns of the Department of Agriculture for the month of December are principally devoted to the indications of the average prices of the product of the farm at the points of production, or in the nearest local markets. The value of corn is 37 cents per bushel, which is 2.4 cents lower than the corresponding price of last year, which was 39.4 cents per bushel, a figure which corresponds nearly with the average farm price of corn for the decade 1880 to 1889 inclusive, which was 39.3, and is 6.1 cents lower than the average for the three years 1890 to 1892, while the average price of wheat is 52.1 cents per bushel. The next lowest price in the 23 years, from 1870 to 1893 inclusive, was 64.5 cents in 1884, the average for the ten years, 1880 to 1889, was 52.7, while for the last three years, 1890 to 1892, it was 76.6. The decline from the average of the last three preceding years, in two of which—viz.: 1891 and 1892—occurred the largest yields in the history of the country, is 24.5 cents, or 32 per cent.

The returns make the general price per bushel of rye 51.8 cents, which is three cents lower than that of last year and 5.2 cents lower than the average during the last decade.

The average farm price of oats as returned for December, 1893, is 28.8 cents per bushel, which is 2.9 cents lower than last year and 1.4 cents less than the average price during the last decade.

The average farm price of barley as returned is the lowest on record. The price is reported at 40.6 cents, as against 47.2 cents a year ago, 54 cents in 1891, 64.8 cents in 1890, and 42.7 cents in 1889.

Unlike the other cereals, the farm price of buckwheat per bushel is the highest since 1888. The average price is 59 cents per bushel, as against 53.4 cents last year, 57.9 cents in 1891, 57.7 cents in 1890, and 51.8 cents in 1889.

The December returns show that the average price of hay is \$9.18 per ton, which is the highest during the last decade, except in 1887, when it rose to \$9.97. The average price in 1892 was \$8.49.

Potatoes on the farm December 1 were selling at an average price of 60 cents per bushel, 7 cents and a fraction less than at the same time last year. The lowest price is sufficiently warranted by the difference in yield between the two years.

The New York Produce Exchange has increased the charges for weighing hay from one to two cents per 100 pounds.





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It has been estimated that this year's barley crop in southern Minnesota was about 25 per cent. less than the previous year. The acreage has been about the same. The crop of malt barley in North Dakota was 50 per cent. greater than last year, while in South Dakota it showed a falling off of nearly one-half. The quality of the barley is much better than it was last year, and prices are about the same.

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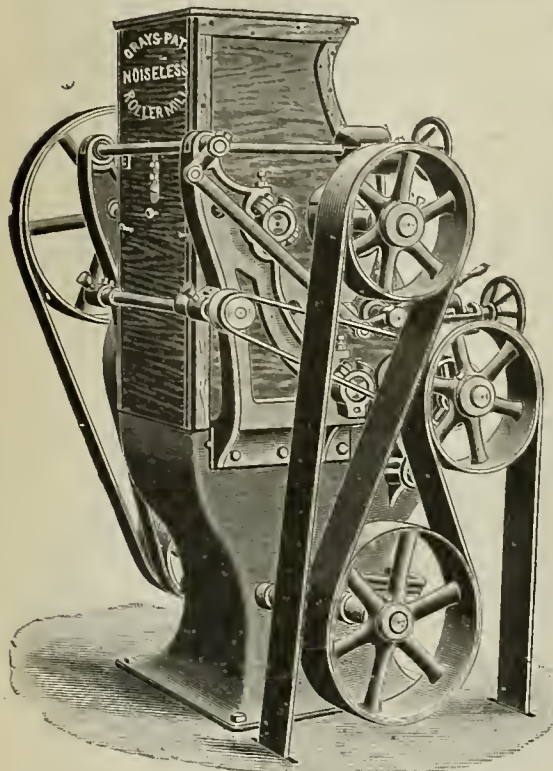
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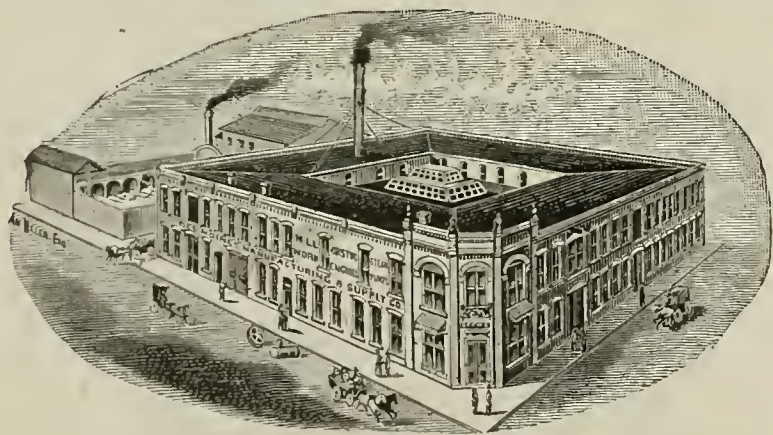
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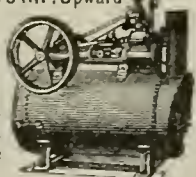
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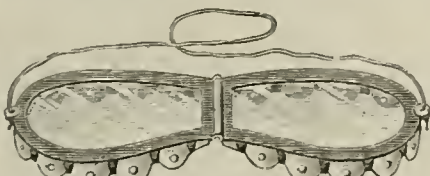
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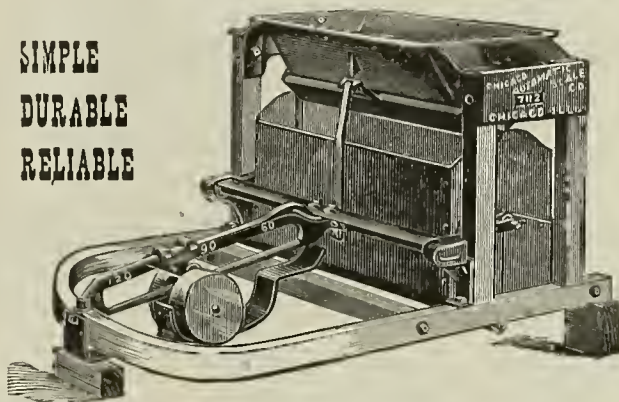
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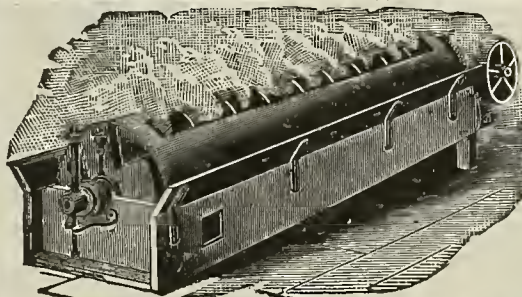
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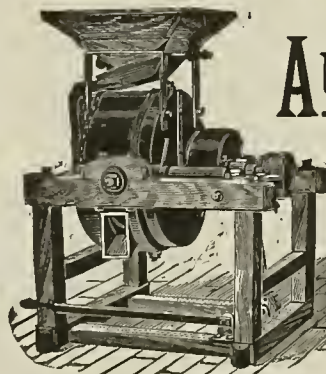


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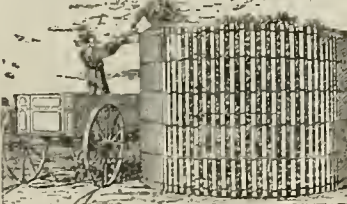
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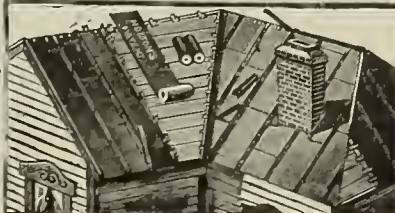
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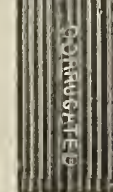
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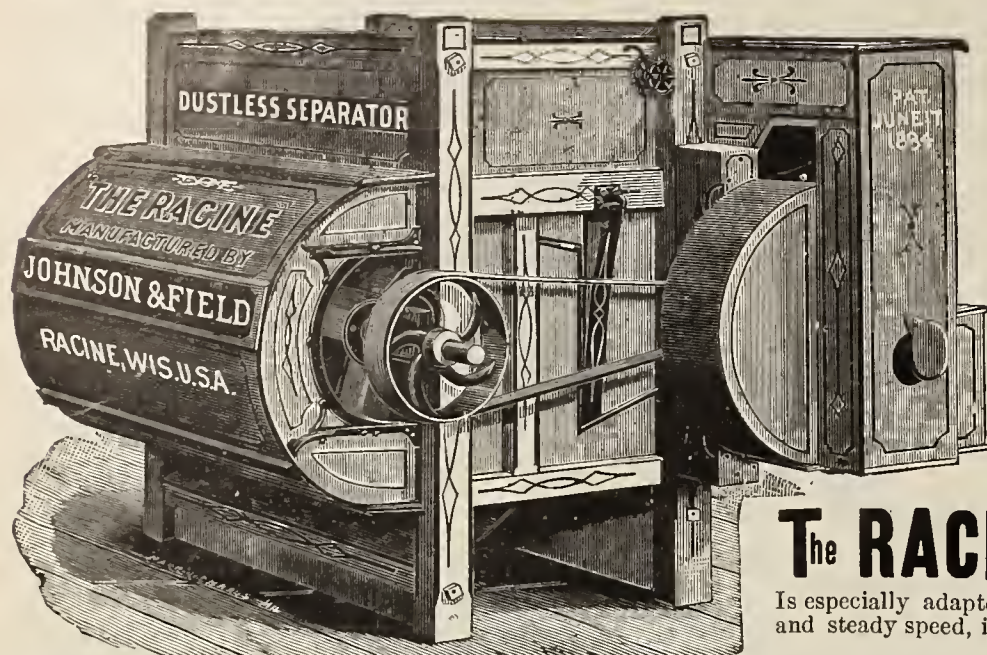
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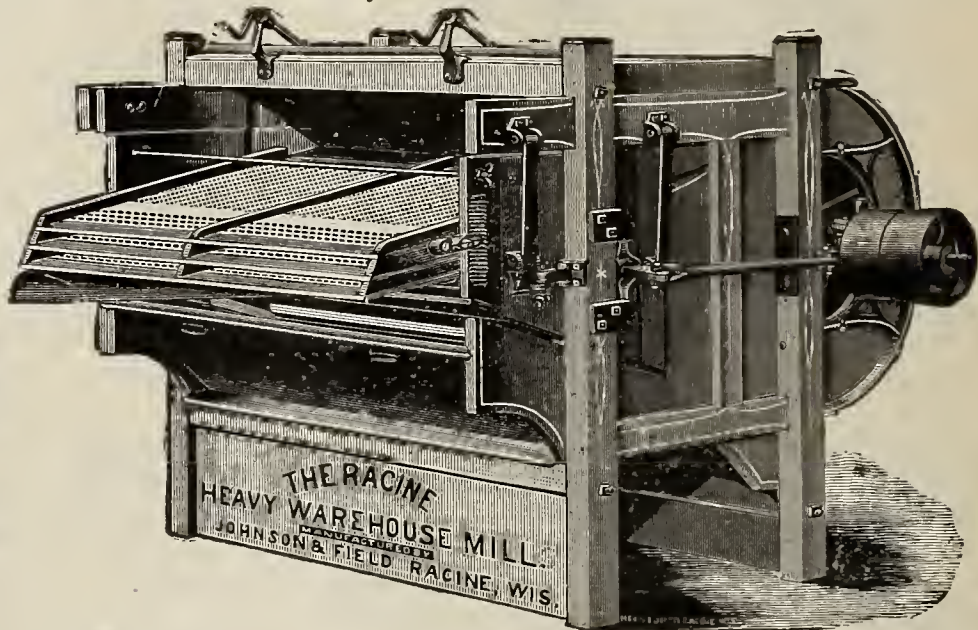
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**The Amount of Wheat Exported from the United States during January,**

we will give the sum of **FIFTY DOLLARS**.

Those who are now, or who become on or before January 1, 1894, subscribers to the only journal devoted exclusively to the interests of the grain trade, will be privileged to fill out as many blank tickets as they can secure from this journal and the **AMERICAN MILLER**. No guesses will be accepted after January 1, 1894.

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The amount of wheat reported by the Bureau of Statistics, in its February report, to have been exported in the form of grain, not flour during January will be accepted as correct.

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<b>\$50</b>	<b>PRIZE GUESSING CONTEST,</b>
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	I AM A SUBSCRIBER FOR THE JOURNAL NAMED ABOVE
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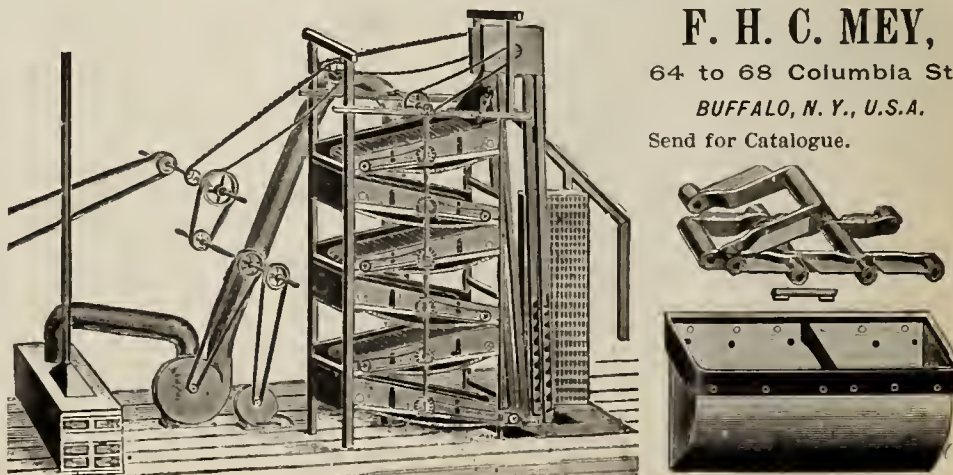
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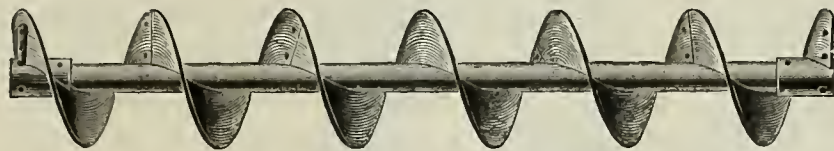
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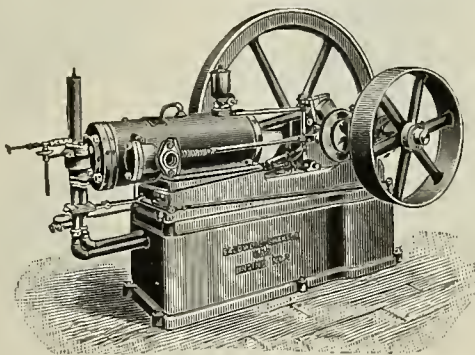


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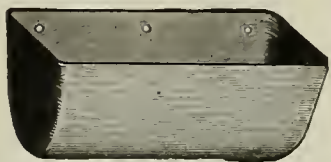
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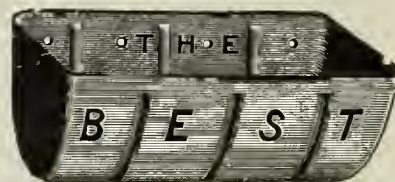


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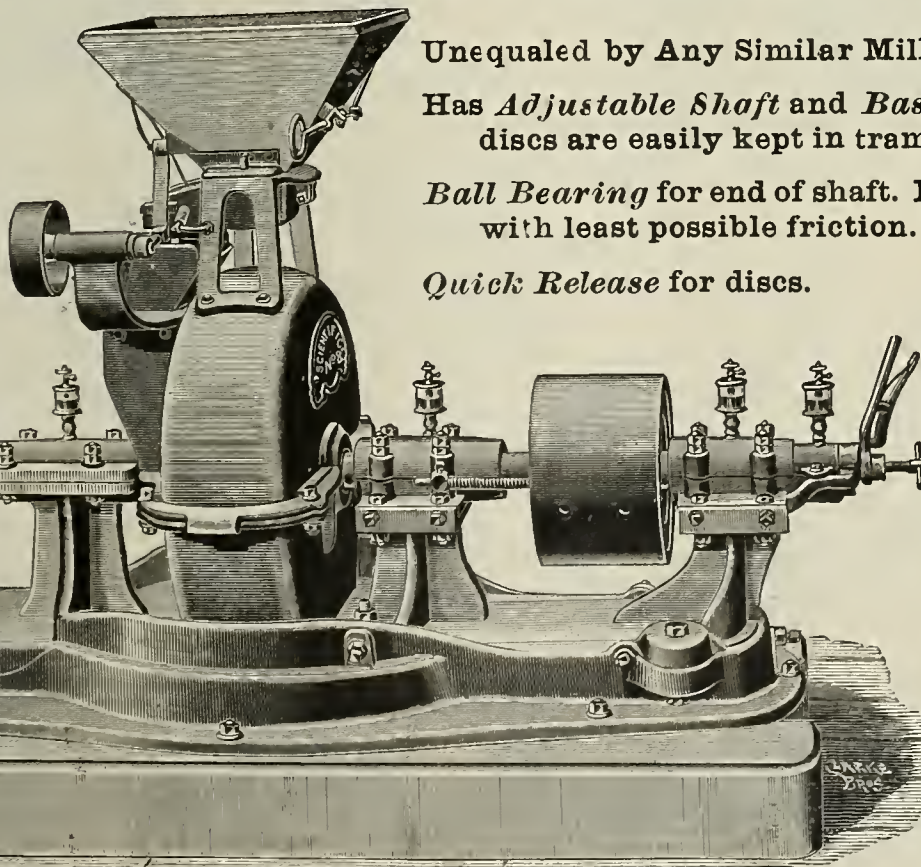
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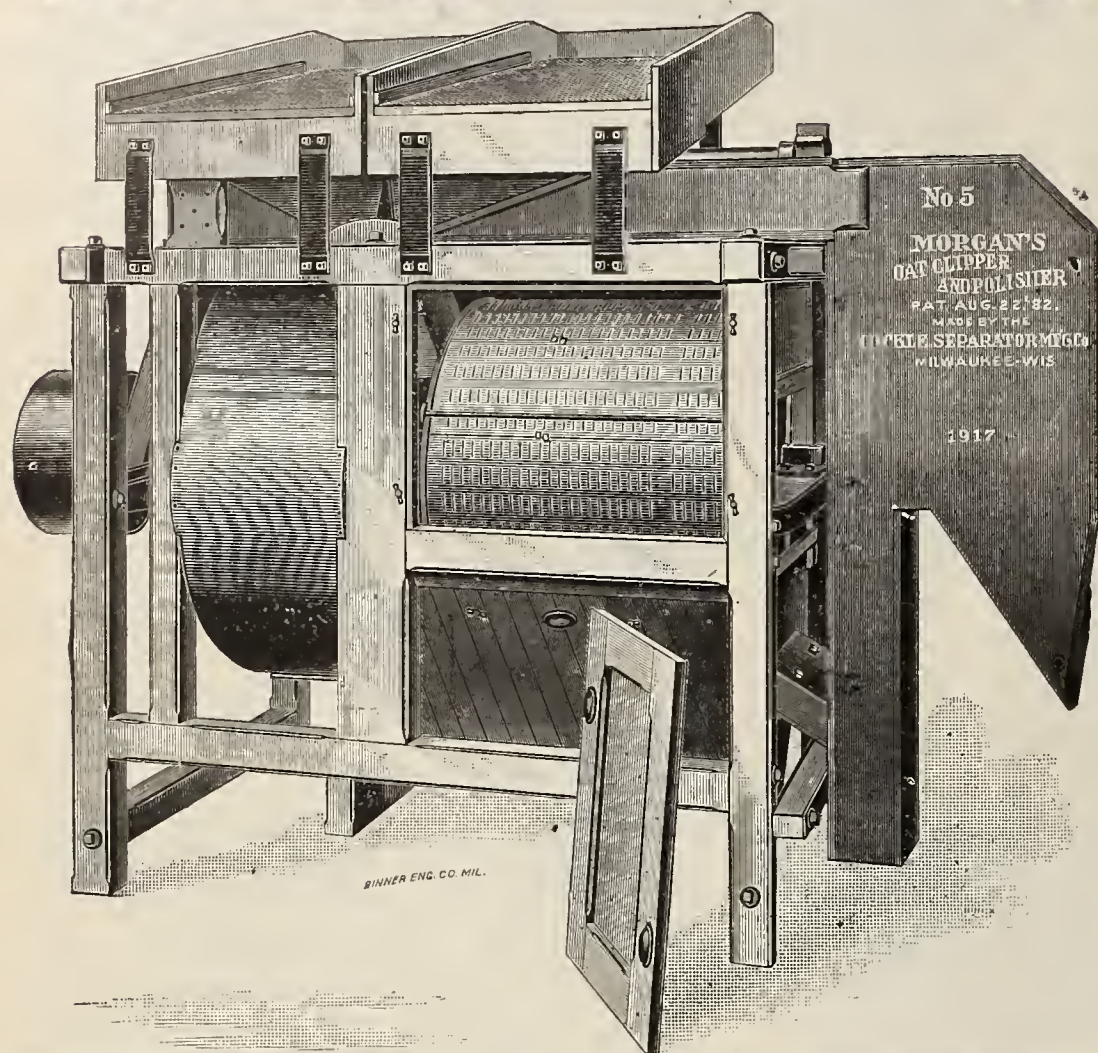
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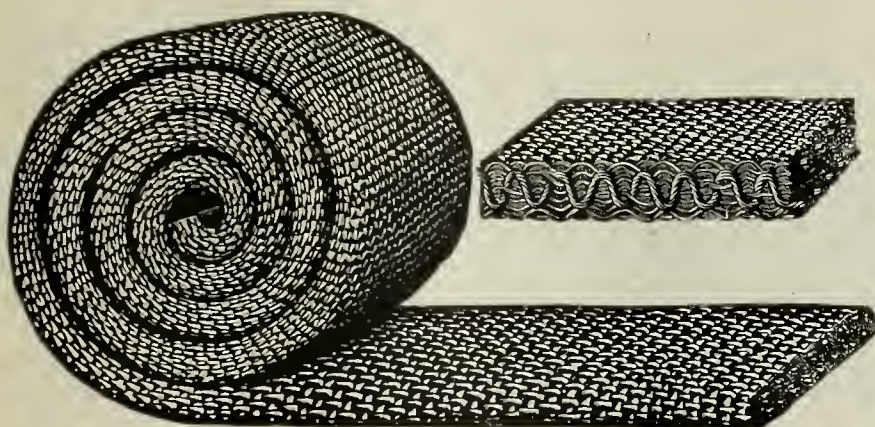


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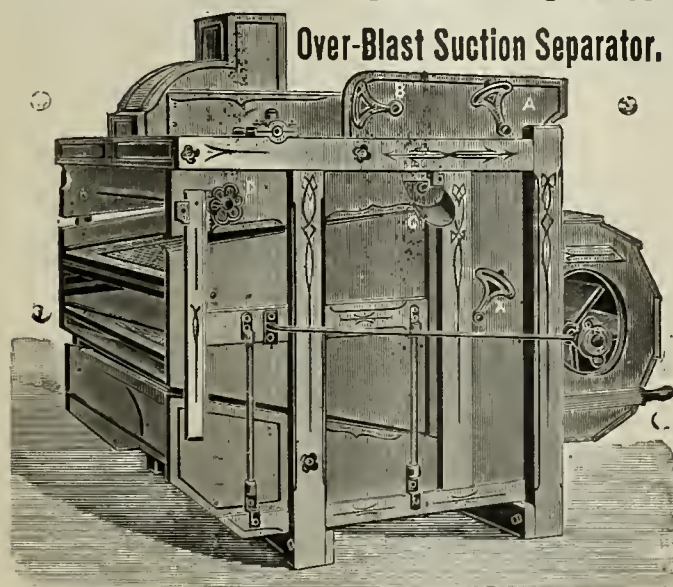
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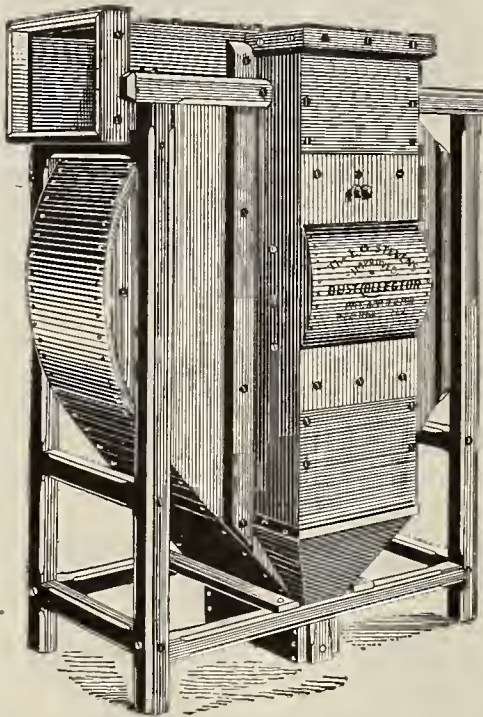
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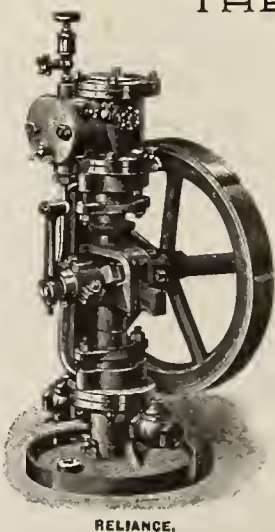
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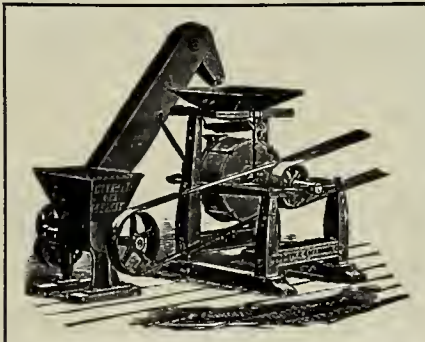
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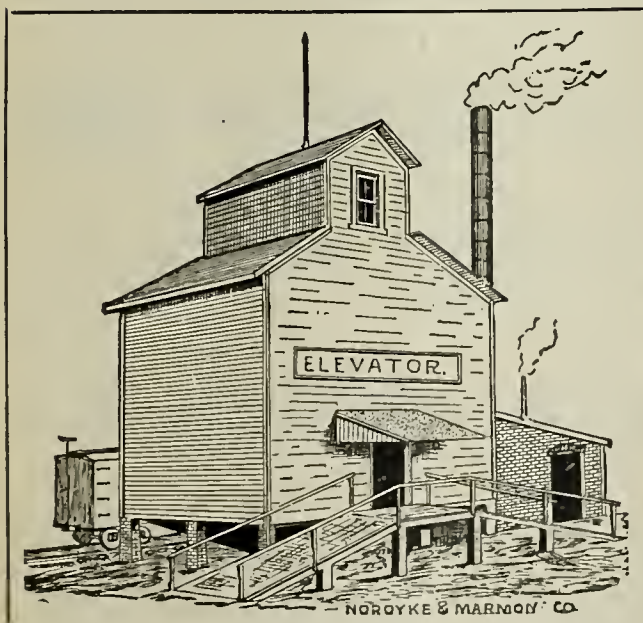


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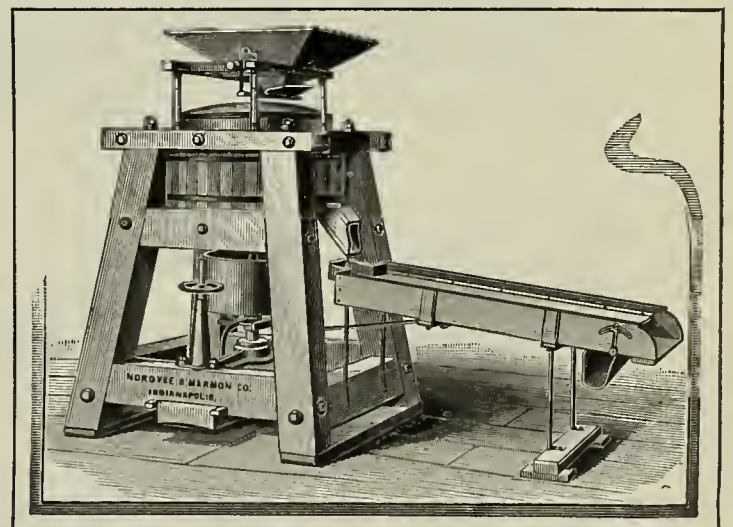
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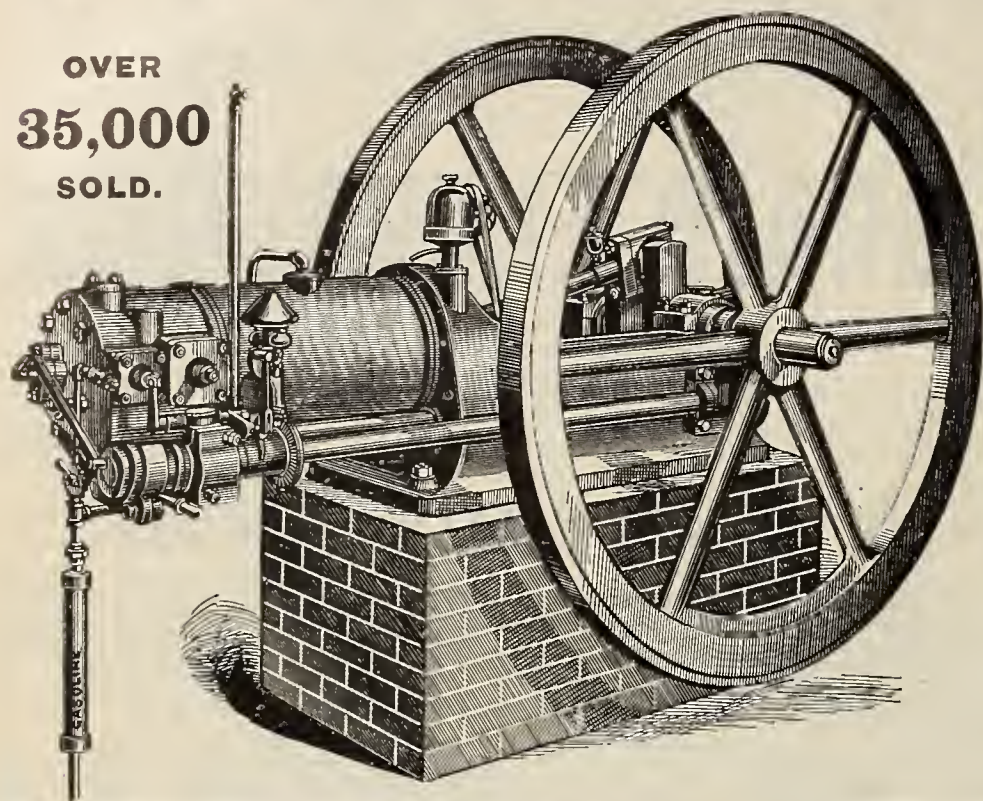


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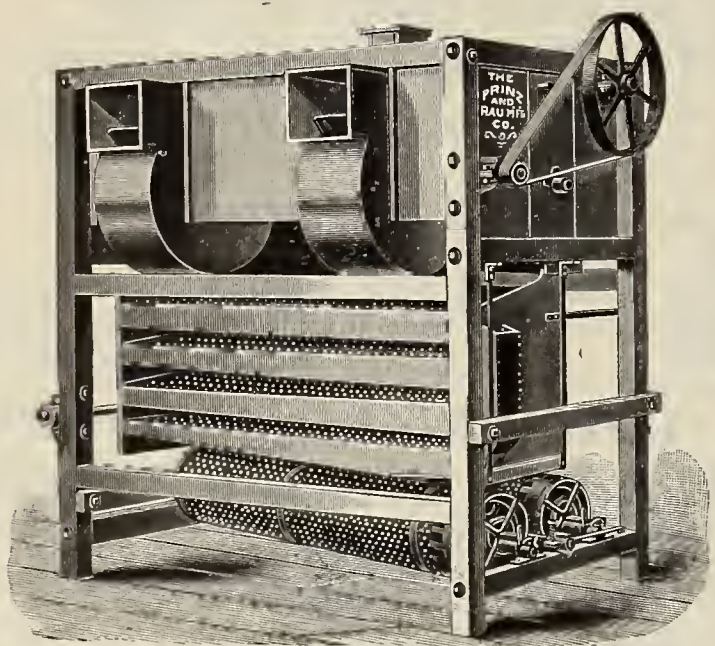
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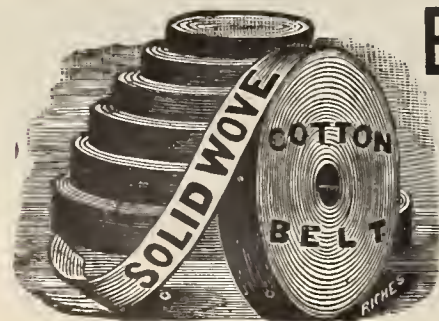
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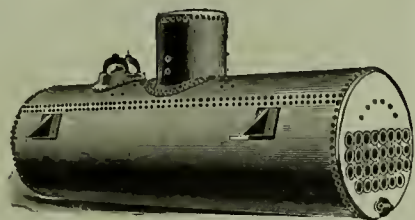
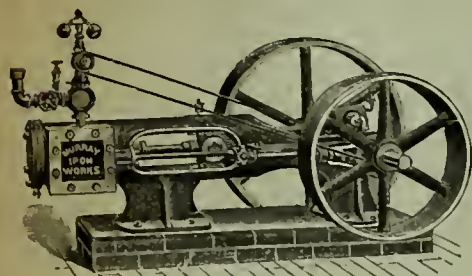


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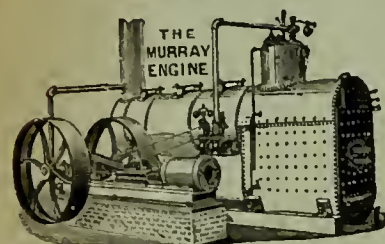
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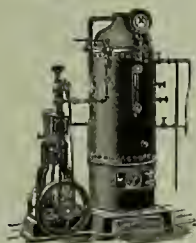
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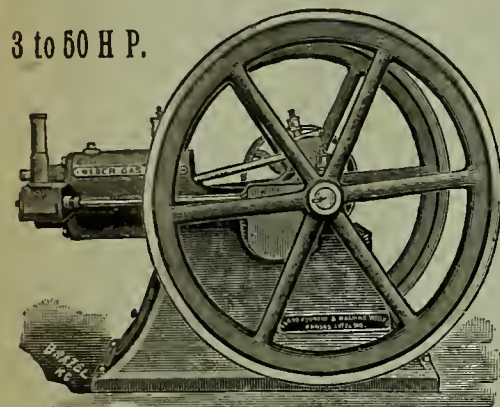
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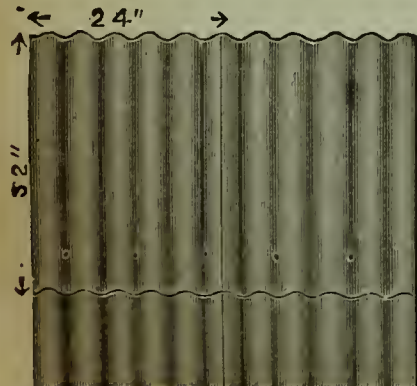
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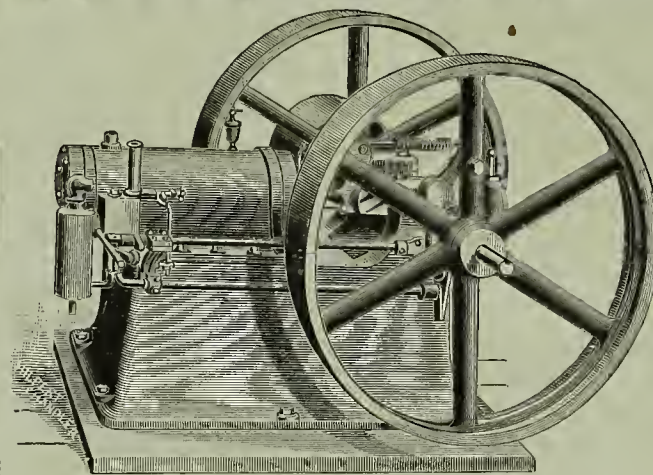
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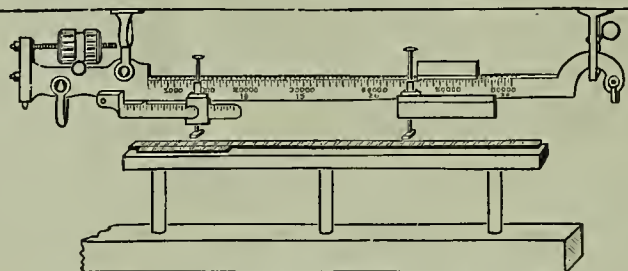
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# GRAIN ELEVATORS,

Office, 539-545 The Rookery,  
CHICAGO, - ILL.

Cable Address: Jumper, Chicago.

REFERENCES :

CHAS. COUNSELMAN & Co.,	CHICAGO, ILL.
REQUA BROS.,	" "
CHICAGO, ROCK ISLAND & PACIFIC R. R. Co.,	" "
DULUTH IMPERIAL MILL Co.,	DULUTH, MINN.
W. C. FUHRER & Co.,	MT. VERNON, IND.
TALPEY BROS. & Co.,	KANSAS CITY, MO.
HIGGS COMMISSION Co.,	" "

## LAST MONTH WE MENTIONED

Among other good features of the "Charter"

# DURABILITY.

Below is a letter on this point, and while it is not in the elevator line, it is good reading:

PRINTING OFFICE.

Charter Gas Engine Co., Sterling, Ill.

MANEATO, MINN., November 2, 1893.

GENTLEMEN:—In 1885 we placed a 4 H. P. Indicated "Charter" Gas Engine, and it pulls a No. 8 Cottrell cylinder, a No. 2 Cottrell pony, R. & C. distribution, and a Campbell Country, separately; will not pull two together. It is economical, reliable, safe and durable, and requires very little attention while running. Insurance is not affected and is in several companies. It replaced 5 H. P. steam plant, and is much more convenient and cost of operation is less. The \$1.25 we paid you in January of this year is all our "Charter" has cost us for repairs since we have owned it. A recent examination of the machine finds all the parts in the most excellent condition, and with proper usage and the right kind of work it ought to last a good many years longer.

Yours respectfully, J. C. WISE & SON.

CHARTER GAS ENGINE CO.,  
400 Locust Street, STERLING, ILL.

# METCALF-MACDONALD CO.,

ARCHITECTS,  
Engineers and Contractors,  
BUILDERS OF

# GRAIN ELEVATORS,

OFFICE, 1075 to 1097 West 15th Street.  
CHICAGO, ILL., U. S. A.

We refer to any of the following for whom we have constructed plants:

Chicago & Grand Trunk R. R. Transfer, Elsdon, Ill., capacity 100 cars per day.  
W. P. Harvey & Co., Kankakee, Ill., 125,000 bushels.  
Fitchburg Railway, Boston, Mass., at Rotterdam Junction, N. Y., 450,000 bushels.  
Middle Division Elevator Co., Chicago, Ill., transfer capacity, 30 cars per day.  
Chas. Counselman, Chicago, Ill., 150,000 bushels.  
A. C. Davis & Co., Horton, Kan., 120,000 bushels.  
Dallas Elevator Co., Dallas, Texas, 750,000 bushels.  
North Texas Mill and Elevator Co., McKinney, Texas, 150,000 bushels.  
Columbia Elevator Co., Columbia, Tenn., 125,000 bushels.  
West Chicago Street Railway Co., 150,000 bushels.  
Ogdensburg Terminal Co., Ogdensburg, N. Y., 1,000,000 bushels.  
Cockrell Grain & Commission Co., Dallas, Texas, 4 elevators.

## SEEDS

**THE ALBERT DICKINSON CO.,**  
Dealers in Timothy, Clover, Flax, Hungarian, Millet, Red Top,  
Blue Grass, Lawn Grass, Orchard Grass, Bird Seeds, &c.  
Warehouses: 115, 117 & 119 Kinzie St. POP CORN.  
104, 106, 108 & 110 Michigan St. OFFICES, 115 Kinzie St  
1600 to 1614 Clark St. CHICAGO, ILL.

# WITTE IRON WORKS CO.,

MANUFACTURERS OF

## GASOLINE ENGINES,

ELEVATOR  
—AND—  
MILL MACHINERY,  
Rope, Drives, Shafting,  
Pulleys, Boxes, Couplings, Etc.  
KANSAS CITY, MO.